



134.08/A :

M. Dorset





S Y N O P S I S  
OF THE  
NATURAL HISTORY  
OF  
*GREAT-BRITAIN AND IRELAND.*

VOL. II.



81570

S Y N O P S I S  
OF THE  
NATURAL HISTORY  
OF  
*GREAT-BRITAIN AND IRELAND.*  
CONTAINING  
A SYSTEMATIC ARRANGEMENT  
AND  
CONCISE DESCRIPTION  
OF ALL THE  
ANIMALS, VEGETABLES, AND FOSSILS,  
WHICH HAVE HITHERTO BEEN DISCOVERED  
IN THESE KINGDOMS.

---

By JOHN BERKENHOUT, M.D.

---

BEING A  
SECOND EDITION OF *THE OUTLINES*, &c.  
CORRECTED AND CONSIDERABLY ENLARGED.

---

V O L II.  
COMPREHENDING THE VEGETABLE  
KINGDOM.

---

L O N D O N:  
PRINTED FOR T. CADELL, IN THE STRAND.  
M DCC LXXXIX.



---

T H E

LINNÆAN SYSTEM.

---

The VEGETABLE KINGDOM is divided  
into Twenty-four Classes; viz.

- Class I. MONANDRIA. Flower hermaphrodite,  
stamen one.
- II. DIANDRIA. Flower hermaphrodite,  
stamina two.
- III. TRIANDRIA. Flower hermaphrodite,  
stamina three.
- IV. TETRANDRIA. Flower hermaphrodite,  
stamina four.
- V. PENTANDRIA. Flower hermaphrodite,  
stamina five.
- VI. HEXANDRIA. Flower hermaphrodite,  
stamina six.
- VII. HEPTANDRIA. Flower hermaphrodite,  
stamina seven.
- VIII. OCTANDRIA. Flower hermaphrodite,  
stamina eight.
- IX. ENNEANDRIA. Flower hermaphrodite,  
stamina nine.
- X. DECANDRIA. Flower hermaphrodite,  
stamina ten.
- XI. DODECANDRIA. Flower hermaphro-  
dite, stamina from twelve to nineteen.

- XII. ICOSANDRIA. Stamina generally twenty or more, fixed not to the receptacle, but to the inside of the calyx.
- XIII. POLYANDRIA. Stamina from twenty to a thousand, fixed to the receptacle.
- XIV. DIDYNAMIA. Stamina four, two long and two short.
- XV. TETRADYNAMIA. Stamina six, four long and two (opposite) short.
- XVI. MONADELPHIA. Stamina united at the base in one body.
- XVII. DIADELPHIA. Stamina united in two distinct sets.
- XVIII. POLYADELPHIA. Stamina united in three or more distinct sets.
- XIX. SYNGENESIA. Antheræ united in a cylinder, flowers composite.
- XX. GYNANDRIA. Stamina inserted in the pistillum.
- XXI. MONOECIA. Male and female flowers distinct, on the same plant.
- XXII. DIOECIA. Male and female flowers on different plants.
- XXIII. POLYGAMIA. Hermaphrodite and also male or female flowers, or both, on the same or different plants of the same species.
- XXIV. CRYPTOGAMIA. Flowers concealed.

### Class I. M O N A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.

II. D I-

## II. D I A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.

## III. T R I A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.

## IV. T E T R A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Tetragynia*. Pistilla four.

## V. P E N T A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Tetragynia*. Pistilla four.  
 5. *Pentagynia*. Pistilla five.  
 6. *Polygynia*. Pistilla many.

## VI. H E X A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Tetragynia*. Pistilla four.  
 5. *Polygynia*. Pistilla many.

## VII. H E P T A N D R I A.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Tetragynia*. Pistilla four.  
 4. *Heptagynia*. Pistilla seven.

## VIII. OCTANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Tetragynia*. Pistilla four.

## IX. ENNEANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Trigynia*. Pistilla three.  
 3. *Hexagynia*. Pistilla six.

## X. DECANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Pentagynia*. Pistilla five.  
 5. *Decagynia*. Pistilla ten.

## XI. DODECANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Pentagynia*. Pistilla five.  
 5. *Octagynia*. Pistilla eight.  
 6. *Dodecagynia*. Pistilla twelve.

## XII. ICOSANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Pentagynia*. Pistilla five.  
 5. *Polygynia*. Pistilla many.

## XIII. PO-



## XIII. POLYANDRIA.

- Order 1. *Monogynia*. Pistillum one.  
 2. *Digynia*. Pistilla two.  
 3. *Trigynia*. Pistilla three.  
 4. *Tetragynia*. Pistilla four.  
 5. *Pentagynia*. Pistilla five,  
 6. *Hexagynia*. Pistilla six.  
 7. *Polygynia*. Pistilla many.

## XIV. DIDYNAMIA.

- Order 1. *Gymnospermia*. Seeds naked.  
 2. *Angiospermia*. Seeds in a pericarpium.

## XV. TETRADYNAMIA.

- Order 1. *Siliculosa*. Seed in a small, round pod.  
 2. *Siliquosa*. Seed in a long, larger pod.

## XVI. MONADELPHIA.

- Order 1. *Pentandria*. Stamina five.  
 2. *Enneandria*. Stamina nine.  
 3. *Decandria*. Stamina ten.  
 4. *Dodecandria*. Stamina twelve.  
 5. *Polyandria*. Stamina many.

## XVII. DIADELPHIA.

- Order 1. *Pentandria*. Stamina five.  
 2. *Hexandria*. Stamina six.  
 3. *Octandria*. Stamina eight.  
 4. *Decandria*. Stamina ten.

## XVIII. POLYADELPHIA.

- Order 1. *Pentandria*. Stamina five in each sett.  
 2. *Icosandria*. Stamina twenty in each sett.  
 3. *Polyandria*. Stamina many in each sett.

## XIX. SYNGENESIA.

- Order 1. *Polygamia æqualis*. Florets all hermaphrodite.  
 2. *Polygamia superflua*. Florets of the disk hermaphrodite, of the radius female.  
 3. *Polygamia frustranea*. Florets of the disk hermaphrodite, of the radius neuter.  
 4. *Polygamia necessaria*. Florets of the radius female, of the disk male.  
 5. *Polygamia segregata*. Within the common calyx many partial calyces, separating the florets.

## XX. GYNANDRIA.

- Order 1. *Diandria*. Stamina two, germen twisted.  
 2. *Triandria*. Stamina three.  
 3. *Tetrandria*. Stamina four.  
 4. *Pentandria*. Stamina five.  
 5. *Hexandria*. Stamina six.  
 6. *Decandria*. Stamina ten.  
 7. *Dodecandria*. Stamina twelve.  
 8. *Polyandria*. Stamina many.

## XXI. MONOECIA.

- Order 1. *Monandria*. Male flowers with one stamen.  
 2. *Diandria*. Male flowers with two stamina.

Order

- Order 3. *Triandria*. Male flowers with three  
stamina.
4. *Tetrandria*. Male flowers with four  
stamina.
5. *Pentandria*. Male flowers with five  
stamina.
6. *Hexandria*. Male flowers with six  
stamina.
7. *Heptandria*. Male flowers with seven  
stamina.
8. *Polyandria*. Male flowers with many  
stamina.
9. *Adelphia*. Male flowers with one set  
of united stamina.
10. *Syngenesia*. Male flowers with united  
antheræ.
11. *Gynandria*. Male flowers with stamina  
growing out of the pistillum.

## XXII. D I O E C I A.

- Order 1. *Monandria*. Male flowers with one  
stamen.
2. *Diandria*. Male flowers with two  
stamina.
3. *Triandria*. Male flowers with three  
stamina.
4. *Tetrandria*. Male flowers with four  
stamina.
5. *Pentandria*. Male flowers with five  
stamina.
6. *Hexandria*. Male flowers with six  
stamina.
7. *Enneandria*. Male flowers with nine  
stamina.

Order 8. *Decandria*. Male flowers with ten stamina.

9. *Dodecandria*. Male flowers with twelve stamina.

10. *Polyandria*. Male flowers with many stamina.

11. *Monadelphica*. Male flowers with one sett of united stamina.

12. *Syngenesia*. Male flowers with united antheræ.

13. *Gynandria*. Male flowers with stamina growing out of the pistillum.

### XXIII. POLYGAMIA.

Order 1. *Monoecia*. Polygamy on the same plant.

2. *Dioecia*. Polygamy on different plants.

3. *Trioecia*. Polygamy on three different plants.

### XXIV. CRYPTOGRAMIA.

Order 1. *Filices*. Fruit on the back of the leaf.

2. *Musci*. Antheræ sessile.

3. *Algæ*. Root, stem, and leaf all in one.

4. *Fungi*. Mushrooms, &c.

THE

---

T H E

VEGETABLE KINGDOM.

---

C L A S S I.

M O N A N D R I A.

Stamen 1.

Ord. I. M O N O G Y N I A.

Pistillum 1.

SALICORNIA. Corolla o. Calyx inflated, square, intire. Seed 1. Leaves o. Stam ?

1. Herbacea. *Marsh Samphire, Jointed Glasswort, or Saltwort.* Herbaceous, spreading, branched, jointed; extremities compressed and bifid. Flowers 3 on each side of each joint. Height about 5 inches. On the sea-shore. A. Aug. Sept. There are four or five varieties of this species.

HIPPURIS. Calyx o. Petals o. Stigma simple. Seed 1.

1. Vulgaris. *Less Marsh Horse-tail, or Mares-tail.* Stem straight, jointed, ending in a spike.

spike. Leaves narrow, growing round the joints, 4, 5, or 6 below, 7—18 above. In springs and bogs. May. P. Ger. 953. Park. 1200. 4.

VALERIANA. See Triandria Monogynia.

1. Rubra. *Red Valerian*. Leaves lance-shap'd, entire. Flower red, with a spur: On old walls. Ger. 550. 1. Park. 123. 11. S. Brit.

## II. DIGYNIA.

Pistilla 2

CALLITRICHE. Calyx 0. Petals 2.  
Capsule bilocular. Seeds 4.

1. Verna. *Vernal Starwort*, or *Star-headed Water Chickweed*. Upper leaves oval, crowded, in form of a star; the rest in pairs. Flowers small, white, androgynous. Stems weak, numerous. A. In ponds and ditches. April to July. There are two or three varieties of this species. Ger. 830. 3.
2. Autumnalis. *Autumnal Starwort*. Leaves in pairs, linear, bifid at the ends. Stems numerous, weak. Flowers hermaphrodite, small, yellowish. In ponds and ditches. Flowers in autumn. Sometimes dioecious.

CLASS

CLASS II.

DIANDRIA,

Stamina 2.

I. MONOGYNIA.

Pistillum 1.

LIGUSTRUM. Calyx of one leaf, tubular, small, with 4 teeth. Corolla below the germent, monopetalous, regular, funnel-shaped, quadrifid. Fruit a berry, with four seeds.

1. Vulgare. *Privet*, or *Prim*. A tall slender shrub. Flowers white, in clusters terminal. Berries black. Leaves in pairs, long, narrow, dark green. In woods and hedges. Jun. Jul. Ger. Herb. 1394.

CIRCÆA. Flower above the germen. Corolla of 2 petals, equal, expanded. Calyx of 2 leaves, oval, deciduous. Seed 1, bilocular, oblong.

1. Lutitiana. *Enchanter's Night-shade*. Stem erect, about a foot long, with a spike of white flowers on the top. Leaves, in pairs, on long footstalks, deep green, oval, but ending in a point. In hedge-bottoms, &c. June, July. P. Ger. 351.

2. Alpina.

2. *Alpina. Mountain Enchanter's Night-shade.*  
 Stem weak, partly procumbent, about 4 inches long. Leaves ferrated. Flowers reddish. August P. I take this to be only a variety of the last.

VERONICA. Calyx irregular, quadripartite, with sharp points and permanent. Corolla monopetalous, irregular, quadrifid, tubular, the segments oval and spreading. Capsule bilocular. Seeds many.

1. *Spicata. Upright Spiked Male Speedwell.* Stem simple, about 2 foot high, terminated by a spike of small blue flowers. Leaves opposite, minutely notched, small, obtuse. In meadows and pastures. June. P. *Ger.* 627. 4. S. Brit.
2. *Hybrida. Welsh, or Bugle-leaved, Speedwell.* Stem erect, near a foot high, terminated by a spike of blue flowers. Leaves opposite, rough, obtusely ferrated, broad. July. P. On Craig Wreidhin in Wales. S. Brit.
3. *Officinalis. Male Speedwell.* Stem procumbent, with lateral spikes of blue flowers. Leaves opposite, hairy, oval, pointed, ferrated; those near the top are narrow. May. P. Among rubbish, and in barren ground. *Ger.* 626. 2. *Park.* 550. 1.
4. *Serpillifolia. Little smooth Speedwell, or Paul's Betony.* Stems numerous, partly procumbent, terminated by loose spikes or bunches of pale blue flowers. Leaves opposite,



opposite, oval, smooth, small, notched, pale. In meadows and pastures frequent. May. *P. Ger.* 503. 3. *Curt.* pl. 3.

5. *Beccabunga*. *Common Brooklime*. Stem creeping. Flowers blue, in loose lateral spikes; leaves sessile, oval, opposite, thick, notched. In shallow water. June. *Ger. Herb.* 620. 1. *Park.* 1236. 1.
6. *Anagallis*. *Long-leaved Water Speedwell*, or *Pimpernel*. Stem erect, thick, branched, about a foot and a half high. Flowers pale purple, in lateral bunches, numerous. Leaves sessile, long, narrow, serrated. July. In shallow water. *Ger.* 620. 2.
7. *Scutellata*. *Narrow-leaved Water Speedwell*, or *Pimpernel*. Stem thick, but little branched, about a foot high. Flowers few, on long slender foot-stalks, purplish or white. Leaves sessile, long, narrow, not serrated. June. On swampy ground.
8. *Chamædrys*. *Wild Germander*. Stem weak, but erect, about eight inches high. Flower large, blue, in lateral bunches. Leaves sessile, opposite, oval, pale green, dentated. In pastures. May. *Curt.* pl. 2. *Ger.* 657. 3.
9. *Montana*. *Stalked Speedwell*, or *Mountain Madwort*. Stalks weak, numerous, inclining, near a foot high, with lateral pale blue flowers on foot-stalks, five or six on each bunch. Calyx hairy. Leaves opposite, wrinkled, on foot-stalks, oval, notched. In hedges and moist woods. May. *P.*

10. *Agref-*

# 14 DIANDRIA. MONOGYNIA.

10. *Agrestis*. *Germander-leaved Speedwell*. Stems many, weak, and five or six inches high. Flowers solitary, blue, axillary. Leaves opposite, on foot-stalks, heart-shaped, irregularly indented. In pastures. May. A. Ger. Herb. 616. i. Park. 764. 4. Curt. pl. i.
11. *Arvensis*. *Chickweed Speedwell*. Root of many small fibres. Stem weak, branched, about four inches high. Flowers pale blue, solitary, axillary, sessile. Leaves opposite, sessile, heart-shaped, irregularly cut on the edges. On old walls; &c. May. A. Ger. 613. 7. Park. 762. 7.
12. *Hederifolia*. *Ivy-leaved Speedwell*, or *Small Henbit*. Stems weak, numerous, six or eight inches high. Flowers single, blue, small, axillary. Leaves plain, 5 lobed, opposite. In corn-fields. April, May. A. Ger. 616. 3. Park. 762. 3.
13. *Triphyllus*. *Trifid Speedwell*. Stems numerous, partly erect, about six inches high. Flowers single, blue, axillary. Leaves alternate, deeply divided, the upper into three, the lower into five parts. In sandy fields. April and May. Annual. Ger. 612. 5. Park. 1260. 6. S. Brit.
14. *Fruticulosa*. *Shrubby Speedwell*. Stem simple, erect. Leaves spear-shaped. Flower white with red streaks. Foot-stalks longer than the floral leaves. On Mountains. May, June. Ger. 628. 5. Park. 551. i.

i5. *Verna*

15. *Verna. Vernal Speedwell.* Flowers blue, single. Calyx larger than the corolla. Flower-stalks very short. Leaves fingered. April, May. A. On old walls and dry sandy places. *With.*

PINGUICULA. Corolla and Calyx gaping; the upper lip trifid, the under bifid. Nectarium a spur produced from the petal. Germen globous. Style very short. Stigma bilabiate. Capsule unilocular. Seeds many.

1. *Villosa. Cornwal, or Less Butterwort.* Stems about three downy inches high, downy single. Spur thickest at the end. Flowers pale red. Leaves lie upon the ground in a circle. May. P. In Cornwal on bogs.
2. *Vulgaris. Common Butterwort, or Yorkshire Sannicle.* Stems like the last, but much taller. Nectarium, or spur, cylindrical, as long as the petal. Flowers resemble violets. Leaves thick, oily, white on the under side. May. P. Most frequent in the North. *Park* 532. 2.

UTRICULARIA. Calyx of two small, oval, concave, deciduous leaves. Corolla of one petal, gaping; lips entire, with a heart-shaped palate between. A spur produced from the petal. Stamina very short, curved. Capsule unilocular.

1. *Vulgaris. Common hooded, or Water-Milfoil.* Stems naked, with lateral yellow flowers on slender foot-stalks. Leaves, like fern,  
are

are under water. Nectarium conic.  
June, July: P. In stagnant water.  
Ger. 828. 5. Park. 1258. 9.

2. Minor. *Less Hooded Milfoil*. Nectarium ridged, and the whole plant much less than the last, near which it is often found.

LYCOPUS. Calyx of one leaf, tubulated, semiquinquefid; segments acute. Corolla below the germen, monopetalous, unequal, tubular, quadrifid, spreading; the upper segment notched. Stamina, pistillum, and corolla nearly of the same height. Seeds 4, naked.

1. Europæus. *Water Horehound*. Stem erect, square, hairy, hollow, about two feet high. Flowers small, white, surrounding the stem at the joints. Leaves large, sessile, oblong, smooth, opposite, sinuated and serrated. On the banks of rivers and lakes in sandy soil. July. P. Ger. 700. 1. Park. 1230. 1.

SALVIA. Calyx tubular, striated, of one leaf, 2 lips, dentated. Corolla 2 single petal, below the germen, tubular, gaping, unequal; the upper lip concave, compressed, notched; the under broad, trifid. Stamina very short and forked. Style long; stigma bifid. Seeds 4, naked.

1. Pratenfis. *Meadow Clary*. Stem upright, firm, angular, near a yard high. Flowers large, purple, in distinct whirls, terminating

nate the stem and branches. Leaves opposite; below, large and notched; above, embrace the stem. July. Rare. *Ger.* 627. 3. *Herb.* 769. 3. 771. 4. S. Brit.

2. *Verbenaca. Common Wild Clary.* Stem firm, square, hairy, about two feet high. Flowers small, blue, in whirled spikes like the last. Leaves opposite, irregularly cut and serrated.

## II. DIGYNIA.

Pistilla 2.

**ANTHOXANTHUM.** Calyx a glume, bivalve, with a single flower. Corolla a glume, of two valves, pointed. Seed 1. Inflorescence a spike, terminal.

1. *Odoratum. Spring Grass.* Culm slender, jointed, eight inches long. Spike loose, yellowish. Florets longer than the beard. In meadows, &c. May. *Curt. pl.* 4.

CLASS III.

TRIANDRIA.

Stamina 3.

MONOGYNIA.

Pistillum 1.

VALERIANA. Calyx  $\sigma$ , or very small.  
 Corolla a single petal above the germen,  
 quinquifid, the base gibbous on one side.  
 Seed naked, single.

1. *Officinalis*. *Great Wild Valerian*. Stem erect,  
 simple, firm, striated, three to five feet  
 high. Flowers terminal, in large tufts,  
 reddish white. Leaves opposite, all pin-  
 nated. June. P. Ger. 1075. 2.
2. *Locusta*. *Corn Salad*, or *Lamb's Lettuce*. Stem  
 forked, slender, eight or ten inches  
 high. Flowers small, bluish white.  
 Leaves opposite, oblong, obtuse. In  
 corn-fields, &c. April, May. A.
3. *Rubra*. See *Monandria Monogynia*.
4. *Dioica*. See *Dioecia Triandria*.

CROCUS, Calyx a *spatha*, or sheath of  
 one valve. Corolla of one petal with  
 six equal segments. Stigmata convo-  
 luted. Germen below the flower. Seeds  
 many, round.

I. *Sativus*.

1. *Sativus. Saffron.* Flowers purple, the tube of the corolla remarkably long. Leaves long and narrow, with a white rib along the middle. *Ger.* 123. 1. *Park.* 167. *S. Brit.*

IRIS. Calyx a sheath of two valves. Corolla sexpartite, the segments alternately erect and reflexed. Stigmata like petals. Germen below. Capsule oblong, angular, trivalve. Seeds many, large.

1. *Pseudacorus. Yellow Water-flag.* Stem erect, simple, about a yard high. Flowers large, yellow. Leaves like swords. July. *P.* On the banks of rivers, lakes, ditches. *Curt.* iii. 33.
2. *Fœtidissima. Stinking Flag-flower, or Gladdon.* Stem angulated on one side. Flowers purplish ash-colour, with the interior segments of the petal spreading. Leaves like the last, but smell disagreeably when bruised. In woods and hedges, &c. June, July. *P. Ger.* 60.
3. *Xiphium. Bulbous flower de luce.* Corolla smooth. Flowers in pairs. Leaves awl-shaped, channelled, shorter than the stem. *P. Ger.* 101. 1. Said by *Dr. Nash*, to be found in *Worcestershire*.
4. *Germanica. German Flower de luce.* Corolla bearded. Stem longer than the leaves. Multiflorous. Lower flowers pedunculate. June. *P. Northumb. Robson.*



SCHOENUS. Flower aggregate, glumose. Common calyx a bivalve glume or husk. Partial calyx of six parts. Corolla 0. Seed 1.

1. Mariscus. *Long-rooted Bastard Cyperus*. Culm, or straw, round, five or six feet high. Leaves three-sided, prickly edges. In fens and bogs. July, August. S. Brit. Ger. 29. 3.
2. Nigricans. *Round black-headed Bog-rush*. Culm naked, roundish, yet somewhat two-edged, about a foot high. Leaves roundish with a ridge. One valve of the common glume long and pointed. In fens and bogs. June. P.
3. Ferrugineus. *Brown Bastard Cyperus*. Culm naked, round, short, with a double spike. The longer valve of the glume equals the spike in length. July. P. In bogs on high moors. Wales, Westmoreland, &c.
4. Compressus. *Compressed Bastard Cyperus*. Culm naked, somewhat triangular. Glume of one valve, with a compressed distich spike.
5. Albus. *White flowered Rush-grass*. Culm triangular, leafy, about a foot high. Panicle erect, broad, white. Leaves extremely narrow, convoluted. July. P. In fens.

CYPERUS. Spike imbricated on both sides. Corolla 0. Seed 1, naked.

1. Longus. *Sweet Cyperus, or English Galingale*. Culm about three feet high, triangular, leafy; a leafy supradecomposite umbel, with naked foot-stalks, and alternate spikes.



spikes. Leaves harsh and somewhat angular. Root long. Odoriferous. July. P. In fens, &c. S. Brit. Ger. 30. 1.

2. Nigricans. *Black-headed Cyperus*. Culm cylindrical, naked. Spikes in an oval head. Glume bivalve.

SCIRPUS. Glumes chaffy and imbricated on all sides. Corolla 0. Seed 1, beset with short hair.

1. Palustris. *Club-rush*. Culm about a foot long, naked, round, in bundles, each culm terminated by a single cylindrical short spike. July. P. On the banks of rivers, ditches, &c. frequent. Ger. 1631. 7.

2. Cœspitosus. *Dwarf Club-rush*. Culm six or eight inches long, naked, striated, in bundles, each culm terminated by a single short spike, with a bivalve calyx, one valve longer than the other. A short narrow strap about the middle of the culm. July. P. In wet pastures, and sometimes on high ground.

3. Pauciflorus. *Chocolate-headed S.* Culm striated, naked; spike terminal with few flowers, which are longer than the calyx; calyx bivalve. Radical leaves as high as the stalk. *Lightf. Append.* Highlands of Scotland. *Hudson* thinks it a variety of the last. Ger. 21. 3.

4. Acicularis. *Least upright Club-rush*. Culm about two inches long, naked, round, with an oval bivalve spike. Leaves curved, rigid, cylindrical. On bogs, &c. August. P.

5. Fluitans. *Floating Club-rush*. Culm round, naked, leafy, soft, short. Spike single. Leaves linear, plane, in alternate bunches. In ponds and ditches. July, August. P.
6. Lacustris. *Bull-rush*. Culm naked, round, five or six feet high, with several oval spikes on short foot-stalks, near the summit. Common in rivers and fens. July, August. P. *Ger.* 31. 3.
7. Holoschoenus. *Round headed Bull-rush*. Culm naked, round, tall, pointed, with several roundish spikes near the top, on foot stalks, with a diphyllous unequal involucre. July. P. On the sea-coast. S. Brit. *H. ex.* viii. 10. 17.
8. Romanus. *Roman S.* Culm cylindrical, very slender, naked; spike lateral, compact; floral leaf bent back. July. P. *Huds.* S. Brit.
9. Setaceus. *Least Rush*, or *small Plymouth Rush-grass*. Culm naked, round, pointed, about a foot high. Spikes lateral, sessile, few. Leaves numerous, cylindrical, and no thicker than horse hair. In wet sandy ground. July, August. A.
10. Mucronatus. *Pointed Bull rush*. Culm triangular, naked, pointed, about a foot and half long, with a naked conglomerate brownish loose spike. Leaves short, few. July, August. P. On the sea-coast, and on the banks of rivers. S. Brit.
11. Maritimus. *Round rooted Bastard Cyperus*. Culm triangular, naked, with a leafy conglobate loose spike. Leaves stiff and

and sharp-edged. On the sea-coast and banks of rivers. Aug. P. Ger. 31. 5.

12. Sylvaticus. *Millet Cyperus-grass*. Culm triangular, leafy, about half a yard high, with a leafy umbel, composed of crowded spikes on supradecomposite naked foot-stalks. Leaves long and somewhat broad. July. P. In wet ground. Ger. 30. 5.

ERIOPHOROM. Glumes, chaffy, imbricated on all sides. Corolla o. Seed 1, environed by long down.

1. Polystachion. *Cotton-grass*. Culm round, slender, about a foot high, with a few plane leaves, and terminated by a pedunculated pendulous spike, resembling when ripe a bale of cotton. June, July. In wet ground. P. Curt. iv. 37.
2. Vaginatum. *Hare's-tail Rush*. Culm sheathed, round, about eight or ten inches long, with a single downy spike. Leaves cylindrical, red in the spring, and numerous from the root. In bogs on high moors. Early in the spring. P. Curt. ib.

NARDUS. Calyx o. Corolla bivalve, closed, forming a pericarpium to the seed, which is single.

1. Stricta. *Mat-grass, or Small Mat-weed*. Culm about a foot high, with an upright, slender, compact, one-sided spike. Leaves like rushes. In fens, bogs, &c. June, August. P. Ger. 1631. 3.

## II. DIGYNIA.

## Pistilla 2.

PHALARIS. Calyx a glume, of two valves, of equal length; a ridge along the back of each, and including the corolla, which is bivalve, and less than the calyx.

1. Canariensis. *Manured Canary grass*. Panicle subovate. Culm round, slender, jointed, from one to two feet high. A single narrow pointed leaf at each joint. Seed white. June to Sept. A. S. Brit. *Ger.* 80. 1.
2. Arundinacea. *Reed Canary-grass*, or *Great Reed-grass*. Culm jointed, branched, four or five feet high. Panicles five or six inches in length, oblong, bellying. Leaves broad, striated. July. P. Banks of rivers. *Ger.* 26. 2.
3. Arenaria. *Sea P.* Panicle long, spike-form. Valves of the glume spear-shaped. Keel fringed. *Huds. Woodw.* S. Brit.
4. Phleoides. *Cat's tail. P.* Panicle cylindrical, smooth, spike-form, divisible into lobes,  $2\frac{1}{2}$  inches long; florets rarely viviparous. First found in Britain by Woodw. and Crow, near Swaffham, Norf. 1780.

PANICUM. Calyx a trivalve glume, containing a single flower; one valve less, and behind the other. Corolla bivalve, unequal, adhering to the seed, which is single. S. Brit.

## 1. Viride.

1. Viride. *Green Panick or Corn-grafs.* Culm slender, round, jointed, procumbent, about five inches long. Spike single, reddish, short, cylindrical, harsh. Leaves one at each joint, embrace the culm. July, August. A. Curt. iv. 44.
2. Crusgalli. *Loose Panick-grafs.* Culm jointed, leafy, from two to four feet high. Spikes large and loose, divided, subdivided, and bearded. Rachis pentangular. August. A. Curt. iv. 41.
3. Sanguinale. *Cock's-foot Panick-grafs.* Culm erect, jointed, reddish. Spikes like fingers. Leaves broader than common, with punctured vaginæ. Aug. A. Curt. iv. 41.
4. Dactylon. *Creeping Panick-grafs.* Spikes fingered like the last. Leaves narrow. Shoots from the root creeping, July. P. In sandy ground. Ger. Herb. 28. 3.
5. Verticillatum. *Rough-eared Panick-grafs.* Little clusters, quatern. Partial involucre of two bristles, uniflorous. Culms diffuse. June, July. A. Curt. iv. 44.

PHLEUM. Calyx a bivalve, sessile, narrow, truncated, forked glume. Corolla less than the calyx, bivalve, unequal. stigma plumose. Seed 1.

1. Pratense. *Meadow Cat's-tail Grafs.* Culm simple, slender, jointed, with vaginal leaves at each joint. Spike cylindrical, two or three inches long, with fringed glumes. July. P. Park. 1170. 1.

2. Arinarium.

2. Arinarium. *Danish Cat's-tail Grass*, or *Sea Canary Grass*. Culm branched. Spike oval, with fringed glumes. On the sea-shore. July. A. Park. 1170. 4.
3. Nodosum. *Bulbose Cat's-tail Grass*. Culm inclining. Spike cylindrical, smooth. Antheræ white. Leaves oblique. Root bulbose. July, August. P. Ger. 12.
4. Paniculatum. *Branched P.* Panicle sub-cylindrical, spike-form. Calyx smooth; stem sometimes branched. Hudf.
5. Alpinum. *Alpine P.* Spike ovato-cylindrical, black, or rather deep purple, near an inch long. Valves of the calyx bearded. N. Brit. *Lightf. app.*
6. Crenitum. *Bearded P.* Glume ligulate, hairy, with very long beards. Culm sub-erect. Panicle close, spike-form. Hudf.

AILOPECURUS. Calyx a glume of two equal valves, containing a single flower. Corolla a single concave valve, the length of the calyx, with a long arista. Seed 1.

1. Bulbosus. *Bulbose Fox-tail Grass*. Culm erect. Spike cylindrical. Root bulbose. In pastures. June. P. S. Brit.
2. Pratensis. *Meadow Fox-tail Grass*. Culm tall, erect. Spike somewhat loose. Glume villous. Corolla without arista. In meadows. May. P. Ger. 11. 1.
3. Agrestis. *Field Fox-tail Grass*. Culm inclining. Spike cylindrical, long and small. Glumes smooth. June, July. P. Curt. ii. 17.

4. Geniculatus.

4. *Geniculatus. Flote Fox-tail Grass.* Culm elbowed at each joint, floating. Spike long, slender, smooth. In ponds, &c. July, August. P. *Ger.* 14. 2.
5. *Panaceus. Hairy Fox-tail Grass.* Culm two feet high. Panicle subspicate, bearded, woolly, long. In wet ditches, &c. July. P. *S. Brit.*
6. *Monspeliensis. Bearded Fox tail.* Much resembles the last, but three times as large. Glumes rough, with a tubercle at the base. *Park.* 1166. 3. *S. Brit.*

**MILIUM.** Calyx a bivalve glume, containing a single flower. Corolla very short, of two unequal valves. Stigmata like pencils. Seed 1.

1. *Effusum. Millet Grass.* Culm about three feet high. Panicle four or five inches long, and the same in diameter, spreading wide. June, July. A. In moist woods. *Curt.* iv. 43.
2. *Lendigerum. Panic Millet Grass.* Panicle subspicate. Culm oblique. Glume swollen at the base. Flowers ovate, bearded. Seed amber-coloured. *With.* A. Aug. Sept. *S. Brit.*

**AGROSTIS.** Calyx a bivalve glume. Corolla of two unequal valves, somewhat less than the calyx. Styles reflex and hairy. Stigmata longitudinally rough.

\* *Bearded.*

1. *Spicaventi. Silky Bent-grass.* Culm three or four feet high. Panicle near a foot long, loose,



loose, waving, filky; with a very long stiff arista growing from the exterior petal of each flower. July. In fields.

2. Rubra. *Red Bent-grass*. Panicle pyramidal, reddish, and spreading when in flower. Exterior petal smooth, terminated by a recurved arista. July. A. In meadows, &c.

3. Canina. *Brown Bent-grass*. Culm prostrate. Calyx elongated, coloured; dorsal arista of the petals recurved, with a brown joint in the middle. Panicle not spread. July, August. P. In wet meadows.

4. Alpina. *Alpine Bent-grass*. Culm erect. Arista elbowed. Leaves setaceous. Corolla hairy at the base. 1. Rough. 2. Smooth. *With*.

5. Vinealis. *Short-bearded Bent-grass*. Calyx coloured. Flowers twice as long as those of the *canina*. Panicle close 3—5 inches long. Culm ascending. *Shreb*.

\*\* *Beardless*.

6. Stolonifera. *Creeping Bent-grass*. Culm about a foot long, creeping and striking root; vagina of the upper leaf inflated. Branches of the Panicle dense, forked. Glumes equivalve, minute. Aug. P. In meadows, but not common. *Ger*. 26. 1.

7. Capillaris. *Fine Bent-grass*. Panicle slender, capillary, spreading. Calyces equal, pointed, coloured. August. P. Common in meadows, &c.

8. Alba. *Marsh Bent-grass*. Culm creeping and striking root. Panicle dense. Calyces equal,



equal, coloured. July. P. In ditches, &c. frequent.

9. Minima. *Small Bent-grass*. Panicle filiform. Culm slender and very short. In Wales. Flowers early in the spring.
10. Sylvatica. *Wood Bent-grass*. Panicle dense. Calyces equal. Corolla before flowering shorter, and after, much longer than the calyx. August. P. In the woods near Hamstead, &c.
11. Pumila. *Dwarf Bent-grass*. Culms smooth, in clusters, two or three inches high. Panicle branched, generally inclining to one side. Flowers dull-grey purple, numerous. *Lightf.* Vol. 2. frontisp.

AIRA. Calyx a bivalve glume containing two flowers, without the rudiment of a third. Corolla bivalve, resembling the calyx. Stigmata downy.

\* *Beardless*.

1. Aquatica. *Water Hair-grass*. Culm creeping. Panicle spreading. Flowers smooth, longer than the calyx. Leaves flat, narrow. Taste sweet. June, July. P. On the banks of rivers, &c. *Curt. pl.* 5.

\*\* *Bearded*.

3. Cæspitosa. *Turfy Hair-grass*, or *great Corn-grass*. Culm about four foot high, but slender. Panicle large, spreading. Petals hairy at the base. Aristæ erect but short. Leaves long, soft, flat. July. P. In moist meadows and woods. *Ger. Herb.* 5. 1.

4. Flexuosa.

4. *Flexuosa*. *Twisted Hair-grass*. Culm almost naked. Panicle whitish purple, divaricated, with winding foot-stalks. Leaves like hair, short. In rocky barren ground. July. P.
5. *Montana*. *Mountain Hair-grass*. Panicle white, narrowed. Aristæ long, twisted. Glumes hairy at the base. Leaves like hair. July, August. P. On high barren ground.
6. *Canescens*. *Grey Hair-grass*. Panicle growing from a sheath. Arista girt in the middle with denticles, brown beneath, whitish above, and somewhat clavated. Leaves like hair. July. A. Sandy ground, near the Sea.
7. *Præcox*. *Early Hair-grass*. Leaves like the former. Sheath angular. Spike loose, small, whitish, with aristæ at the base of the floscules. Culm short. May, June, A. In sandy ground. *Curt.* iii. 25.
8. *Caryophylea*. *Silver Hair-grass*. Leaves like the rest. Panicle silvery-purple, divaricated; flowers distant; aristæ twisted. Culm short. July. A. In sandy ground.

MELICA. Calyx a bivalve glume containing two flowers, with the rudiments of a third between. Corolla bivalve, beardless. Stigmata hairy.

1. *Nutans*. *Melic-grass, or Red Oat-grass*. Panicle drooping, simple, red. June, July. P. In moist woods. *Park.* 1151. 5.
2. *Cærulea*. *Purple Melic-grass*. Panicle dense; flowers cylindrical. Culm with a single joint.

joint. Leaves flat. Root bulbosc.  
August. P. On wet barren ground.

POA. Calyx a beardless, bivalve glume, containing many flowers. Spike oval. Corolla bivalve, compressed, pointed, somewhat longer than the calyx, and rough at the edges. Styles hairy.

1. Aquatica. *Reed Meadow-grass*. Panicle diffuse; spiculæ with six linear flowers. Culm tall. Leaves broad. July. P. On the banks of rivers, &c. *H. ox.* iii. p. 201.
2. Alpina. *Alpine Meadow-grass*. Panicle diffuse, with many branches. Spiculæ cordate, with six florets. Var. viviparous.
3. Trivallis *Common Meadow-grass*. Culm erect, cylindrical. Panicle diffuse; spiculæ with three flowers, downy at the base. June—August. P. In meadows and pastures every where. *Curt.* ii. 15.
4. Angustifolia. *Narrow-leaved Meadow-grass*. Culm erect, cylindrical. Panicle diffuse; spiculæ with four flowers, downy. July. A. In woods and hedges. *H. ox.* viii. 5. 19.
5. Pratenfis. *Great Meadow-grass*. Culm erect, cylindrical, half a yard high. Panicle diffuse; spiculæ with five flowers, smooth. June, July. P. In meadows, &c. *Curt.* ii. 14.
6. Annua. *Annual Meadow grass, or Suffolk-grass*. Culm oblique, compressed. Panicle diffuse at right angles; spiculæ obtuse. May—September. In meadows, &c. every where. *Curt.* pl. 6.
7. Maritima.

7. *Maritima. Sea Meadow-grass.* Culm six inches, elbowed. Calyces edged with purple; spiculæ sub-cylindrical, of six or eight florets. Panicle dense, branched, pointing one way. Sea coast.
8. *Pilosa. Hair-leaved Meadow-grass.* Panicle spreading, stiff. Radical leaves like hair. May, June. A. In dry pastures.
9. *Rigida. Hard Meadow-grass.* Culm short, stiff. Panicle oblong, tapering to a point, branched. Branches alternate; flowers on one side only. Spiculæ with six or eight flowers. Calyx carinated. July. A. On walls and sandy ground. *Curt. ii. 24.*
10. *Compressa. Creeping Meadow-grass.* Culm oblique, compressed. Panicle dense, with flowers on one side only. June. A. On walls and other dry places.
11. *Nemoralis. Wood Meadow-grass.* Culm curved. Panicle tapering; spiculæ generally of two flowers, pointed, rough. Leaves narrow. June. A. In woods, &c.
12. *Bulbosa. Bulbose Meadow grass.* Culm with knobs at the bottom. Panicle crisp, spreading a little. Spiculæ with four flowers. July. P. In meadows, &c.
13. *Distans. Distant Meadow-grass.* Panicle with branches sub-divided. Florets five, distant, obtuse. On barren sandy ground. June, July. P.
14. *Cristata. Crested Meadow-grass.* Panicle almost a spike. Calyx somewhat hairy, generally

generally containing four flowers, which are longer than the foot-stalk. Petals bearded. July, Aug. P. On high barren ground.

BRIZA. Calyx a bivalve glume containing several flowers. Spiculæ distich, heart-shaped. Valves heart-shaped, obtuse; the interior minute. Seed 1, very small.

1. Minor. *Small Quaking-grass*. Spiculæ triangular. Flowers seven, shorter than the calyx. July. P. In pastures, rare. *Park*. 1165. 5.
2. Media. *Common Quaking-grass*. Panicle loose, Spiculæ oval. Flowers seven, longer than the calyx. Culm about ten inches high, with single vaginal leaves at the joints. Glumes on long slender foot-stalks. July. P. In pastures, &c. *Ger. Herb.* 86. 2.

DACTYLIS. Calyx a bivalve acute carinated glume, longer than the flower. Corolla also a glume, compressed, acute. Antheræ forked. Stigmata simple.

1. Cynosuroides. *Smooth Cock's-foot Grass*. Culm two feet high, with six broad, smooth leaves, rough at the edges and longer than the culm. Spikes on one side only, diverging. Calyx contains a single flower. August, Sept. A. In marshes, &c.
2. Glomerata. *Rough Cocks-foot Grass*. Panicle of several close spikes, on one side only. June—August. P. In meadows, &c. Vagina of the leaves biangular. Leaves rough. *Park*. 1182. 5.

**CYNOSURUS.** Calyx a bivalve glume containing several flowers; proper receptacle unilateral, leafy. Corolla bivalve; exterior valve longest and concave.

1. *Cristatus.* *Crested Dog-tail Grass.* Culm about two feet high, jointed, with long narrow vaginal leaves. Bractææ, or floral leaves, pinnatifid. Spike unilateral, fringed, above an inch long, brownish. Aug. P. *Park.* 1160. 3.
2. *Echinatus.* *Rough Dog-tail, or Fox-tail Grass.* Bractææ exterior only, alternately pinnated, bearded. Calyx bifloral, sharp-pointed. Florescence an unilateral bunch, rough, harsh. July. A. On sandy ground. S. Brit. *Park.* 1168. 6.
3. *Cœruleus.* *Blue Dog-tail Grass.* Culm short. Racemus, or bunch, entire, blue. Bractææ intire. July. P. In high pastures, &c.

**FESTUCA.** Calyx a bivalve, upright, glume, containing several flowers. Corolla bivalve, longer than the calyx, closed, pointed. Spiculæ oblong, somewhat cylindrical. Styles short, reflex. Stigmata simple. Glumes pointed.

\* *Panicle unilateral.*

1. *Ovina.* *Sheep's Fescue-grass.* Culm square, with a few hair-like leaves. Panicle bearded, compact. June, July. P. In high pastures.
2. *Duriuscula.* *Hard Fescue-grass.* Panicle oblong, drooping, harsh, branched towards the bottom; spiculæ pointing upwards, fix-

six-flowered. Leaves like small rushes. In dry meadows, &c. June. P.

3. Rubra. *Purple Fescue-grass*. Panicle loose, rough, red. Spiculæ six-flowered, bearded, except the last flower. Culm semi-cylindrical. June. P. In dry meadows.
4. Myurus. *Wall Fescue-grass*. Culm about two feet high. Panicle spicate, long, drooping. Calyces very small. Flowers rough, long-bearded. June. A. On walls, &c. Ger. 29. 2.
5. Bromoides. *Barren Fescue-grass*. Spiculæ erect. Calyx with one valve long and pointed, the other small, intire. May, June. A. In barren ground.
6. Elatior. *Tall Fescue-grass*. Panicle erect, branched. Spiculæ bearded, the exterior cylindrical. Leaves not very narrow, smooth. July. P. In meadows, &c. but rare.
7. Amethystina. *Red Fescue-grass*. Panicle waved; spiculæ inclined, bent one way, and almost beardless. Leaves setaceous. In meadows. June, July. P.
8. Dumetorum. *Pubescent Fescue grass*. Panicle spike-form, pubescent. Leaves filiform. Culm sixteen inches; joints large. June, July. In hedges.
9. Glabra. *Smooth Fescue-grass*. Panicle three inches, branched, erect, compact; spiculæ subulate of three florets, bearded. Culm twelve inches, smooth. *Lightf. Append.* July. P.



10. *Cambrica. Welsh Fescue-grass.* Panicle lateral, erect, branched; spiculæ bearded, smooth. Leaves flat, naked. *Hudsf.* July, Aug. P.

\*\* *Panicle equal.*

11. *Decumbens. Small Fescue-grass.* Panicle erect: Spiculæ beardless. Calyx longer than the flowers. Culm decumbent, short. Aug. P. In moist barren pastures.
12. *Fluitans. Floating Fescue-grass.* Panicle branched, erect, long. Spiculæ, two or three on each branch, on very short footstalks, cylindrical, beardless. In fens and ditches frequent. June, July. P. *Curt. pl. 7.*

BROMUS. Calyx a bivalve, multiflower, spreading glume. Corolla bivalve; inferior valve larger than the other, obtuse, bifid, with an arista from below the apex. Spiculæ oblong, cylindrical, bilateral.

1. *Secalinus. Field Broom-grass.* Culm three feet high. Panicle spreading; glumes smooth; spiculæ oval; beards straight. Leaves rough on one side. May, June. A. In meadows, &c.
2. *Tectorum. Wall Broom-grass.* Culm slender. Panicle drooping; glumes fringed. Leaves and vaginæ downy. Florets 8. May. A. On walls and barren pastures.
3. *Sterilis. Barren Broom-grass, or Wild-Oats.* Culm about one foot and a half high. Panicle spreading, drooping; spiculæ oblong,



oblong, bilateral. Glumes large, sharp, six or seven flowered. Leaves smooth and not very narrow. June, July. A. Woods, fields, hedges, &c. frequent. *Curt.* i. 4.

4. *Arvensis*. *Corn or Wood Broom-grass*. Panicle branched, scattered, drooping. Spiculæ oblong, compressed. Leaves somewhat broad, soft. July. A. In corn-fields, &c.
5. *Giganteus*. *Tall Broom-grass*. Panicle drooping. Spiculæ four-flowered; aristæ short. Leaves broad. August. P. In moist woods and ditches.
6. *Racemosus*. *Cluster Broom-grass*. Panicle a simple racemus or bunch; pedicles alternate, bearing a single oval, pointed flower. Leaves woolly beneath.
7. *Pinnatus*. *Spiked Broom-grass*. Culm undivided. Spikes alternate, sub-seffile, cylindrical; the plane side towards the culm. Beards terminal. June. P. In dry meadows.
8. *Squarrosus*. *Rough Broom-grass*. Panicle nodding; spiculæ oval; beards divaricate. In corn-fields. July. A.
9. *Asper*. *Great branched Broom-grass*. Panicle nodding, rough, twelve inches; spiculæ hairy, bearded, about ten in number. Leaves rough. Culm six—eight feet. August. A. *Lightf. App. Curt.* ii. 18.

STIPA. Calyx a bivalve, one-flowered, loose, pointed glume. Corolla bivalve, equivalve; the exterior terminated by a very long twisted arista, jointed at the base.

1. Pennata. *Feather-grafs*. Beards feathered; ten inches long. On mountains. July, August. P. Ger. 42. 6.

AVENA. Calyx a bivalve loose glume. Corolla bivalve, with a dorsal spiral arista.

1. Elatior. *Tall Oat-grafs*. Culm about three feet high, jointed. Panicle long and loose. Calyx with two flowers, the hermaphrodite floscule beardless, the male bearded. Root three or four bulbs one above the other. Leaves harsh. July, August. P. In meadows, &c. Curt. iii. 32.
2. Nuda. *Naked Oats, or Pilcorn*. Paniculate, Calyx three-flowered. Receptacle exceeds the calyx. July. A. In corn-fields, but scarce. Ger. 75. 2.
3. Fatua. *Bearded Oat-grafs*. Panicle spreading; calyces three-flowered, base of the floscules hairy. Culm jointed. Aug. P. In corn-fields. Ger. 77.
4. Flavescens. *Yellow Oat-grafs*. Panicle loose, yellowish; calyces three-flowered, short, all the floscules bearded. Curt. iii. 35.
5. Pratensis. *Meadow Oat-grafs*. Panicle spicate. Calyces five-flowered. Leaves rolled inwards. July. P. In high pastures, on a chalky soil.
6. Pubescens. *Rough Oat-grafs*. Calyces generally three-flowered, base hairy. Panicle purplish shining white. Leaves plane, downy. On downs and dry pastures. June. P.

7. Strigosa.

7. *Strigosa*. *Scrannel Oat-grass*. Paniculate, biflorous; outer valve of the corolla ending in a double beard shorter than the valve. Calyx the length of the florets, ribbed. The awn from the back, twice as long as the florets. Among oats, barley, rye. June, Aug. A. *With*.

ARUNDO. Calyx a bivalve glume, erect. Corolla bivalve. Florets compact, beset with down. Seed 1, downy.

1. *Phragmites*. *Common Reed-grass*. Culm jointed, hollow. Calyxes five-flowered. Panicle loose. Leaves long, sharp-edged. July. P. In rivers, lakes, &c. frequent. *Ger.* 36. 1.
2. *Epigejos*. *Small Reed-grass*. Panicle erect, green; calyx one-flowered. Leaves smooth beneath. July. P. On barren hills.
3. *Calamagrostis*. *Branched or Woolly Reed-grass*. Culm about four feet high, rough, with few joints, branched. Calyxes one-flowered. Panicle spicate, soft, white. June, July. P. In moist woods and hedges. *Ger. Herb.* 9. 1.
4. *Arenaria*. *Sea Reed-grass, or Mat-weed*. Spike long, soft. Calyxes one-flowered. Leaves sharp-pointed, the edges rolled inwards. June, July. P. On the sea-shore. *Ger.* 42. 3.

LOLIUM. Calyx a glume of one leaf, containing several flowers on bilateral sessile spikes.

1. Perenne.

1. Perenne. *Red Darnel*. Culm jointed, about a foot long. Spikes beardless, flat, red. Leaves narrow. June. P. In fields and roads frequent. *Ger.* 78. 2.
2. Temulentum. *White Darnel*. Culm two feet or more in length, slender, jointed. Spike bearded, flat, near a foot long. July, August. A. In corn-fields. *Ger.* 78. 1.
3. Bromoides. *Sea Darnel*. Panicle entire, unilateral. Spiculæ bearded. Root fibrous. Culms many, 9 inches, branched. Leaves shorter than their Stalks. *Huds.* May, June. A. In loose sand.

ROTTBOELLA. Spike jointed, sub-cylindrical, or filiform. Calix ovato-lanceolate, flat, divided. Florets alternate on a waved spine.

1. Incurvata. *Curved Hard-grass*. Spike cylindrical, but tapering towards the apex. Glume subulate, of 2 valves, beardless, external. Valves of the corolla equal, brownish white. July, Aug. P. Sea coast.

ELYMUS. Calyx lateral, bivalve, aggregate, containing several flowers. Spiculæ two.

1. Arenarius. *Sea Lyme-grass*, or *Quick-grass*. Culm jointed, about a foot long. Spike erect, long, downy. Spiculæ with two flowers, beardless, shorter than the calyx. Leaves involuted, sharp-pointed, whitish. May, June. P. On the seashore,

2. Caninus.

2. *Caninus*. *Bearded Quick-grass*, or *Dog-grass*. Spike drooping, contracted. Calyces subulate, with four florets, bearded. June, July. P. In woods and hedges. *Huds.*
3. *Europæus*. *European Lime-grass*. Spike erect; spiculæ biflorous, equal the involucre. In habit a *hordeum*. In wood in the north frequent. June. P. *Park.* 1144. 7.

**SECALE.** Calyx a glume of two leaves, containing two flowers. Corolla bivalve, the exterior ending in a beard.

1. *Villosum*. *Wood Rye-grass*. Scales of the calyx wedged-shaped; fringe of the glume woolly. July. A. In woods and hedges.

**HORDEUM.** Calyx a glume with six leaves, containing three florets, sessile. Corolla bivalve, bearded.

1. *Murinum*. *Wall Barley-grass*. Culm about six inches long. Spike resembles an ear of barley. Lateral flowers male, bearded. April, July. A. On walls, &c.
2. *Nodosum*. *Knotted Barley-grass*. Lateral flowers beardless. Taller than the last.

**TRITICUM.** Calyx a bivalve glume, solitary, sessile, generally containing three florets. Corolla bivalve, one valve bellying, the other plane.

1. *Junceum*,

1. Junceum. *Rush Wheat-grafs*. Calyx truncated, with five flowers. Leaves involuted, pungent, rush-like. P.
2. Repens. *Common Wheat-grafs, Dog's-grafs, or Quick-grafs*. Calyx taper, pointed, three-flowered. Culm jointed. Root creeping. Leaves sharp-edged. June, August.
3. Maritimum. *Sea Wheat-grafs*. Culm about seven inches long, sometimes branched a little. Spike branched; spiculæ, with eight or ten florets, alternate, sessile. Leaves as long as the culm, with purplish vaginæ. May, June. P. On the sea-coast. *Poa loliacea*. Huds.

## III. T R I G Y N I A.

Pistilla 3.

MONTIA. Calyx, perianthium, of two leaves. Corolla monopetalous, irregular, quinquepartite. Capsule unilocular, trivalve. Seeds 3.

1. Fontana. *Water Chickweed, or Blinks*. Culm creeping, reddish, very short, branched. Leaves opposite. Flowers small, white, on long foot-stalks. N. B. The calyx has sometimes three leaves, and the corolla five stamina. April. A. In brooks, &c.

TILLÆA. Calyx, with three or four divisions. Petals three or four, oval. Capsules three or four.

1. Muscosa

1. Muscosa. *Mossy T.* Stems prostrate, at first almost erect, generally red, grow longer after flowering. Parts of fructification, constantly three. Leaves in pairs, fleshy. On dry heaths. Norfolk and Suffolk. *Woodw.* May, June. P. *With.*

HOLOSTEUM. Calyx five-leaved. Petals five. Capsule one cell, subcylindrical, opening at the top.

1. Umbellatum. *Umbelliferous Mouse-ear.* Stem above bare of leaves. Leaves oval. Petals white, almost entire. Fruit pendant. Sandy corn fields. April, May. A.

POLYCARPON. Calyx of five leaves, oval. Petals five, short, oval, notched, alternate. Capsule unilocular, trivalve.

1. Tetraphyllum. *Four-leaved All-seed.* Stem branched, prostrate. Leaves in fours. Dry sandy ground. May, Aug. A.

## CLASS IV.

## TETRANDRIA.

Stamina 4?

## MONOGYNIA.

Pistillum 1.

\* *Corolla irregular, of one Petal.*

DIPSACUS. Common calyx of many leaves, containing several flowers. Proper calyx above the germen, very minute. Corolla monopetalous, quadrid, tubular, the external segment largest. Receptacle conic, with a great number of sharp paleæ. Seed single.

1. Fullonum. *Great Teasel*. Culm three or four feet high, branched, beset with prickles. Leaves sessile, serrated, opposite, with a row of prickles on the back middle rib. Paleæ of the fruit curved downward. July. B. In hedges. *Ger. Herb.* 1167. 1.
2. Sylvestris. *Wild Teasel*. Leaves connected, entire. Paleæ straight. Com. involu-  
crum of long leaves encircling the head. June, Aug. B. *Ger. Herb.* 1167. 2.  
*Park.* 984. 2. *Curt.* iii. 34.
3. Pilosus. *Small Wild Teasel*, or *Shepherd's Staff*. Head roundish, about the size of a nut-  
meg.



meg. Leaves on foot-stalks, with two small wings at the base. In moist ground, hedges, &c. Aug. B. *Curt. pl.* 10.

SCABIOSA. Common calyx, of many leaves, surrounding the receptacle in various series, containing several flowers, and spreading. Proper calyx double, above the germen. Corolla monopetalous, tubular, of four or five slight segments. Receptacle chaffy, roundish. Seed single, crowned.

1. *Succisa. Devil's-bit.* Corollulæ quadrifid, regular. Stem round, solid, single. Branches near each other. Leaves oval, pointed, opposite. Flowers blue. June, August. P. In meadows, &c. *Ger.* 726.
2. *Arvensis. Field Scabious.* Corollulæ quadrifid, radiant. Stems two or three, about three feet high, hairy, round, hollow. Leaves hoary, oblong, divided on the edges. Flowers numerous, blue. August. P. In corn-fields, &c.
3. *Columbaria. Less Field Scabious.* Corollulæ quinquifid, radiant. Radical leaves oval, notched; stem-leaves pinnated and very narrow. June, July. P. In high pastures.

\*\* *Corolla regular, of one petal, above the germen.*

SHERARDIA. Calyx small, of one leaf, quadridentate, permanent. Corolla funnel-shaped, with four segments, acute, plane; tube long, cylindrical. Seeds two, tridentate.

1. *Arvensis.*

1. *Arvensis. Little Field Madder.* Stems several, square, procumbent, hairy, branched, reddish. Leaves in whirls, at the joints of the stem. Flowers terminal, blue. May, June. A. In corn-fields. *Park.* 276. 5.

ASPERULA. Calyx small, quadridentate. Corolla funnel-shaped; tube cylindrical, long; segments four, obtuse, reflexed. Fruit two dry berries. Seed single.

1. *Odorata. Woodroof.* Stems several, square, weak, near a foot long. Leaves eight in number, in whirls, lance-shaped. Flowers white, in clusters, on foot-stalks, odoriferous. May. P. In woods, &c. *Curt.* iv. 43.
2. *Cynanchica. Squinancy Wort.* Stems several, small, weak, square, branched. Leaves smooth, narrow, four at each joint. Flowers terminal, in clusters like umbels, reddish, smell sweet. July. P. On chalky hills.

GALIUM. Calyx small, of one leaf, with four teeth. Corolla regular, monopetalous, plane, without tube, with four segments, acute. Fruit two dry berries, each containing a single seed.

1. *Palustre. White Lady's Bedstraw.* Stem diffuse, square, slender, weak, about eighteen inches long. Leaves in fours, unequal, somewhat oval, pointed. Flowers numerous, in clusters, terminal, small, white. Fruit smooth. July. P. Banks of rivers, &c. *Ger.* 1126. 2.

2. *Uligi-*

2. *Uliginosum*. *Marsh Goose-grass, or Cleavers*. Stem square, weak, rough, about eight inches long. Leaves, generally six at each joint, lance-shaped, rough, rigid. Flowers white, terminal, in clusters; corollæ larger than the fruit. Fruit smooth. July, August. P. On commons, moist pastures, &c. Hampstead-Heath.
3. *Spurium*. *Smooth-seeded Goose-grass*. Stems square, numerous, about a foot long; joints single. Leaves lance-shaped, six round each joint, carinated, rough. Flowers white, terminal. June. A. In corn-fields, rare.
4. *Pufillum*. *Least Lady's Bedstraw*. Stems numerous, square, five or six inches long. Leaves generally eight at each joint, somewhat imbricated, linear, acute, rough. Branches not very numerous, alternate. Flowers white, on footstalks twice divided. Seed smooth. August. On the mountains in Westmoreland.
5. *Verum*. *Yellow Lady's Bedstraw, or Cheeserunning*. Stem firm, erect, brown, square. Leaves generally eight in each whirl, linear, pointed, brittle; and often reflex. Branches short, generally two from each joint, terminating in spikes of small yellow flowers. July, August. Common, in dry ground.
6. *Mollugo*. *Wild Madder, or great Bastard-Madder*. Stem square, branched, three or four feet long, very weak. Leaves, eight at each joint, smooth, soft, blunt-pointed. Flowers small, white, numerous,

merous, in several spikes on the tops of spreading branches. June, July. P. Hedges, heaths, &c. common. *Ger.* 1118. 2.

7. Boreale. *Crosswort Madder*. Stem erect, square, reddish, about a foot long. Leaves, four at each joint, smooth, lance-shaped, trinerved. Flowers small, white, in spikes on the tops of the branches. Seed rough. June—August. P. On hills in the north.
8. Aperine. *Cleavers* or *Goose-grass*. Stem square, very rough, jointed. very weak, two, three or four feet long, adhesive. Branches opposite. Joints hairy at the base. Leaves, eight or ten at each joint, narrow, pointed, above rough, beneath smooth, carinated. Seeds rough. Flowers white, small, few on slender foot-stalks on the tops of the branches. May, Aug. A. In fields, &c. frequent. *Curt.* ii. 17.
9. Parisiense. *Least Goose-grass*. Stem about a foot long, weak, square, rough. Leaves seven at each joint, narrow, pointed, rough, especially on the edges. Branches opposite, short, bearing small white flowers, two or three on each foot-stalk. Seeds rough. July. P. On walls and in moist barren ground.
10. Procumbens. *Prostrate Cleavers*. Leaves obovate, in fives, pointed; peduncles ternate. Stem smooth. *Lightfoot* thinks it a variety of the *G. Uliginosum*. June, Aug. P. *G. montanum* of Huds.
11. Erectum. *Erect Cleavers*. Leaves in eights, smooth, lance-shaped, serrated. Panicles

nicles tripartite. Stem rough, flaccid.  
*Huds.* June, July. P. G. Scabrum  
 of *Jacquin*.

RUBIA. Calyx minute, of one leaf,  
 with four teeth, above the germen. Co-  
 rolla of one petal, campanulate, with  
 four segments, plane, acute. Fruit  
 two round succulent smooth berries,  
 with each a single seed.

1. *Peregrina.* *Wild Madder.* Stem, about a foot  
 long, square. Leaves four at each joint,  
 elliptical, smooth, and bright above,  
 rough beneath. Flowers on the tops of  
 the branches, yellow, small. July,  
 August. P. In the west of England  
 frequent.

SANGUISORBA. Calyx of two very  
 short leaves, soon falling off. Corolla  
 quadrifid, spreading, germen between  
 the calyx and corolla. Capsule unilo-  
 cular, opening transversely. Seeds  
 many, small.

1. *Officinalis.* *Great wild Burnet.* Stem three  
 feet high; round, striated smooth, hol-  
 low. Leaves pinnated, smooth, glossy,  
 alternate. Spike short, oval, brown.  
 June, July. P. In meadows and pas-  
 tures frequent.

\*\*\* *Corolla of one petal, regular, below the germen.*

PLANTAGO. Calyx quadrifid, erect,  
 very short, permanent. Corolla mono-  
 petalous, quadrifid, reflex. Stamina

very long. Capsule bilocular, opening transversely. Seeds many. Florescence a spike, terminal.

1. Major. *Great Plantain*, or *Waybread*. Stalk naked, eight or ten inches long, tough, cylindrical. Spike long, cylindrical, imbricated. Leaves oval, smooth, with seven longitudinal ribs. June, July. A. Common.
2. Media. *Hoary Plantain*. Stalk naked, cylindrical. Spike cylindrical. Leaves ovato-lanceolate, downy. July, August. P. Common.
3. Lanceolata. *Ribwort*, or *Ribwort-plantain*. Stalk angular, naked. Spike somewhat oval, naked. Leaves lance-shaped, with five ribs. June, August. P. In meadows, &c. frequent.
4. Maritima. *Sea Plantain*. Stalk naked, cylindrical, eight or ten inches high. Leaves narrow, semi-cylindrical, intire, woolly at the base. June, July. P. On the sea-coast.
5. Coronopus. *Buck's-horn Plantain*. Stalk naked, round, five or six inches long, with a slender spike. Leaves narrow, pinnated, dentated, lying on the ground in the form of a star. July, Aug. A. On barren ground.
6. Loefflingi. *Narrow-leaved Plantain*. Stalk naked. Spike oval, hairy. Leaves linear, a little indented. Floral leaves navicular, membranous. S. Brit.

CENTUNCULUS. Calyx quadrifid, spreading, permanent; segments sharp-pointed,

pointed, longer than the corolla. Corolla monopetalous, regular, quadrifid, spreading below the germen; tube inflated. Capsule globose, unilocular, opening transversely. Seeds many, small.

1. *Minimus. Bastard Pimpernel.* Stems, three or four, four or five inches long, procumbent. Leaves roundish, alternate. Flowers in the axæ of the leaves, white, minute. On moist sandy ground, near the paper-mill on Hounslow-heath, &c. June. A.

\*\*\* *Corolla of four petals, regular, above the germen.*

CORNUS. Calyx double: involucrem of four leaves, coloured, deciduous: perianthium minute, of one leaf, with four teeth, above the germen. Corolla acute, plane, less than the involucrem. Stamina longer than the corolla. Fruit, *drupa*, containing an oblong umbilicated nut, in which are two cells with a kernel in each.

1. *Sanguinea. Female Cornel, Dogberry, Gatter-tree, or Prickwood.* A shrub about five feet high. Trunk firm, red-brown. Branches straight. Leaves conjugate, oval, pointed, with the edges intire. Flowers small, white, in naked clusters. Fruit oblong, size of a pea, black, very bitter. June. In hedges frequent.
2. *Suecica. Dwarf Honey-suckle.* An herb. Stem erect, six inches high; two branches on the top, with a white flower between, succeeded by a red fruit, like a mulberry. Leaves sessile, opposite, smooth,



intire, oval, pointed with five longitudinal ribs. June. P. On our northern hills.

**EUONYMUS** Calyx with four segments spreading. Corolla regular, of four petals. Capsule quadrangular, quadrilocular, quadrivalve, coloured. Seed covered by an exterior coat.

1. *Europeus. Spindle Tree.* A shrub six or eight feet high. Branches, by ridges in the bark, appear square. Leaves conjugate, elliptical, pointed, obtusely serrated. Flowers greenish white, in bunches on conjugate pedicles. Fruit angular, purplish. May, June. In woods and hedges.

\*\*\*\*\* *Corolla* o.

**ALCHEMILLA.** Calyx, of one leaf, tubular, permanent, with eight segments, alternately equal, plane. Stamina small, in the rim of the calyx. Seed one, elliptical, compressed.

1. *Vulgaris. Ladies Mantle.* Stems drooping, round, thick, a foot or more in length. Leaves roundish with eight or ten points, folded like a fan, pale green, hairy, on long foot-stalks. Flowers, in tufts, yellowish green. June, August. In meadows, &c. frequent. *Ger.* 949.
2. *Alpina. Cinquefoil Ladies Mantle.* Stems about five inches long, drooping. Leaves, on long foot-stalks, five fingered, serrated, pale green above, silver



silver white beneath. Flowers greenish.  
July. P. On the northern hills. Ger.  
988. 5.

## II. DIGYNIA.

Pistilla 2.

GENTIANA. Calyx and corolla with four segments. Stigmata oval, without styles. Capsule oblong, unilocular, bivalve. Seeds numerous, small. Receptacles two, longitudinal.

1. *Campestris*. *Vernal Dwarf Gentian*. Stem erect, about two or three inches high, not branched, terminated by a single blue flower. Radical leaves lance-shaped, spread upon the ground; on the stem not more than one or two pair. Corolla cup-fashioned, woolly within. May, June. A. In mountainous pastures.
2. *Filiformis*. *Marsh Centaury*. Stem forked, slender. Leaves narrow, pointed. Flowers yellow, on long pedicles, funnel-shaped, not bearded within. July. A. In marshy ground. Vide *Pentandria Digynia*.

APHANES. Calyx, of one leaf, tubular, permanent, with eight segments alternately regular. Corolla o. Stamina small, on the rim of the calyx. Seeds two, oval, pointed, compressed.

1. *Arvensis*. *Parsley-piert*. Sometimes with but one pistil. Stems three or four inches  
E 3 long,

long, procumbent, covered with leaves, which are deeply indented. Flowers small, greenish white, in clusters among the leaves, along the branches. May. A. In corn-fields, &c. frequent. *Alchemilla. With.*

BUFONIA. Calyx, of four leaves, erect, permanent. Corolla of four petals, oval, notched, erect, equal, shorter than the calyx. Stamina not invariably four; sometimes two, very rarely three. Capsule oval, bilocular, bivalve. Seeds two.

1. *Tenuifolia. Bastard Chickweed.* Stalk round, slender, erect, jointed about eight inches high. Branches alternate. Leaves two at each joint, narrow, pointed. Flowers in the axæ of the leaves, small, white. May. P. On the coast near Boston in Lincolnshire. On Hounslow-heath. S. Brit.

CUSCUTA. Calyx of one leaf, quadrifid. Corolla monopetalous, quadrifid. Capsule bilocular, opening transversely. Seeds two.

1. *Europæa. Dodder.* Stem naked, reddish, twisting round any other plant, whence, having no root of its own, it receives nourishment. Flowers in clusters on the stalk, white, sessile. July. A. In corn-fields, &c. *Huds. Ger. 577.*
2. *Epithymum. Less Dodder.* Flowers sessile, quinquefid, surrounded by leaves. Corn-fields and heaths frequent. June, Aug. A. *Huds. Park. 10. 1.*

III. TETRA-

## III. TETRAGYNIA.

Pistilla 4:

ILEX. Calyx, of one leaf, small, with four teeth, permanent. Corolla monopetalous, with four roundish, concave, segments. Style o. Stigmata four. Fruit a berry, with four seeds.

1. Aquifolium. *Holly-tree*. Leaves oval, prickly. Flowers small, whitish. Berries red when ripe. In hedges. June. Ger. 1338.

POTAMOGETON. Calyx o. Corolla of four petals, obtuse, concave, erect, deciduous. Stamina very short. Styles o; stigmata obtuse. Seeds four, roundish, pointed, angulated.

1. Natans. *Broad-leaved Pondweed*. Leaves single, oblong, oval, on long footstalks, swimming, brown-green. Stem long, round, jointed. Flowers small, yellowish, on spikes two inches long. Aug. P. In rivers and ponds.
2. Perfoliatum. *Perfoliated Pond-weed*. Leaves alternate, heart-shaped, surrounding the stem, glossy and ribbed longitudinally. Stalk two or three feet long. Spike short, on a thick pedicle. Flowers small, yellowish. June, July. P. In rivers and ponds.

3. Lucens. *Long-leaved Pond-weed*. Leaves lance-shaped, pellucid, glossy, ending

in a petiolus. June. P. In rivers and ponds.

4. *Crispum. Great Water Caltrops.* Leaves alternate, lance-shaped, waved, serrated. Stalk very long, jointed, branched, flat. Flowers white or reddish, in bunches, on foot-stalks. May, June. P. In rivers, ponds, ditches, frequent.
5. *Serratum. Serrated Caltrops.* Leaves lance-shaped, opposite, waved a little, serrated, glossy. Stem round. Flowers green-yellow, on foot-stalks. June. P. In flow rivers.
6. *Compressum. Small branched Pond-weed.* Leaves long, narrow, ribbed, obtuse. Stalk long, compressed, branched. Flowers small, greenish, on short spikes. In rivers. June, July. P.
7. *Gramineum. Grass leaved Pond-weed.* Leaves lance-shaped, alternate, sessile. Stalk crowded with branches and leaves. A. In ditches.
8. *Pectinatum. Fennel-leaved Pond-weed.* Leaves very narrow, convex on both sides, parallel, and near each other, two inches long. Branches numerous, long, naked, bearing remote bunches of flowers. June. P. In rivers. Serpentine-river, Hyde-Park.
9. *Marinum. Sea Pond-weed.* Leaves linear, alternate, distinct, the base sheathing the stem. August. A. In ditches on the coast.
10. *Pufillum. Small Grass leaved Pond weed.* Leaves linear, opposite, alternate distinct,

tinged, spreading at the base. Stalk round. June, August. P. In ponds and ditches.

11. *Densum*. *Less Pondweed*. Leaves oval, pointed, opposite, close. Stems forked. Spikes quadrifloral. Flower-stalks rise from the division of the stem. June. P.

RUPPIA. Calyx o. Corolla o. Seeds four or five on slender foot-stalks. Antheræ sessile. Styles o.

1. *Maritima*. *Sea grass*. Leaves long, narrow, pointed alternate. Stalk single, about eight inches high. August. A. In salt-water ditches.

SAGINA. Calyx of four leaves, oval, concave, spreading, permanent. Corolla of four petals, regular, obtuse, shorter than the calyx. Capsule quadrilocular, quadrivalve. Seeds many.

1. *Procumbens*. *Pearlwort*, *Chickweed*, *Break-stone*, or *Moss-like Pink*. Stem and branches small, spreading on the ground like moss. Leaves small, narrow. Flowers small, green-white. June. A. On walls, and barren sandy ground.
2. *Apetala*. *Downy Pearl wort*. Stem more erect, downy. Flowers alternate; petals very minute. Root A. Brown-green. On walls.
3. *Erecta*. *Least Stichwort*. Stem erect, bearing generally a single white flower on the top.

top. Leaves opposite, glossy, sessile, oval, pointed. April, May. A. In pastures frequent.

LINUM. Vide *Pentandria Pentagynia*.

1. Radiola. *Least Rupturewort*, or *All-seed*.  
Stalks numerous, forked, two or three inches long, spreading in a tuft on the ground. Leaves opposite, sessile. Flowers minute, white. August. A. In waste ground.

CLASS V.

PENTANDRIA.

Stamina 5.

I. MONOGYNIA.

Pistillum 1.

\* *Flowers regular, of one petal, below the germen, with four naked seeds, and rough leaves.*

MYOSOTIS. Corolla tubular, the rim expanded, with five segments, notched ; tube closed by five small valves. Stamina in the neck of the tube, very short.

1. Scorpioides. *Mouse-ear Scorpion-grass.* Stem round, hairy, terminated by a long loose curled spike of blue flowers. Leaves hairy, soft, oblong, obtuse, alternate, sessile, callous at the ends. April, Aug. P. Common in moist and dry situations. Ger. 337. 3.

LITHOSPERMUM. Corolla funnel-shaped, about the length of the calyx, with five slight segments, obtuse, erect ; tube cylindrical and open at the top. Stamina very short. Seeds naked.

1. Officinale. *Common Gromwell.* Stem about two feet high, rough, hard, branched. Leaves

Leaves lance-shaped, alternate, sessile. Flowers small, white, ranged along the branches among the leaves. Seeds smooth. May, June. P. In barren ground. *Ger.* 609. 2.

2. *Arvense Bastard Alkanet.* Stem about one foot high, thick, rough, branched at the top. Leaves lance-shaped, alternate. Flowers white, on short foot-stalks among the leaves. Root reddish. Seeds rough. May, June. A. In corn-fields frequent. *Ger.* 610. 4.

3. *Purpureo-cœruleum. Creeping Gromwell.* Stems rough, creeping. Leaves lance-shaped, alternate. Corolla much longer than the calyx, purple. Seeds smooth. The flower-bearing stems are erect, and the flowers terminal. June. P. On hills. *Ger.* 609. 1.

**ANCHUSA.** Corolla funnel-shaped, with five slight segments; tube, the length of the calyx, closed by five valves. Stamina very short. Seeds oblong, notched at the base.

1. *Sempervirens. Ever-green Alkanet, or Bugloss.* Stem round, thick, hairy, branched, two or three feet high. Leaves oval, pointed, rough. Flowers numerous, blue, in round bunches, on foot-stalks with two leaves. May, June. P. Among rubbish, &c. *Ger.* 797. 3.

**CYNOGLOSSUM.** Corolla funnel-shaped, length of the calyx; tube short, and closed by five valves; rim with five slight



slight segments. Stamina very short.  
Style permanent. Seeds four, fixed to  
the style.

1. Officinale. *Hound's Tongue*. Stem erect,  
branched, thick, about two feet high.  
Leaves sessile, tongue-shaped, pointed,  
downy, ribbed. Flowers purplish, on  
short foot-stalks in naked spikes. June.  
A. Among rubbish, road-sides, &c.  
*Ger.* 804. 1.

PULMONARIA. Calyx tubular, pen-  
tangular. Corolla funnel-shaped; rim  
quinquifid; segments obtuse, somewhat  
erect; tube pervious, and somewhat  
globular at the end.

1. Officinalis. *Broad-leaved Lungwort*, or *Bugloss*  
*Cowslip*. Calyx the length of the tube  
of the corolle. Stem angular, hairy,  
about a foot high. Radical leaves on  
foot-stalks, broad, oval, hairy; the rest  
long, sessile. Flowers white and purple  
or blue, in round clusters. May. P.  
*Ger.* 808. 1.
2. Angustifolia. *Narrow-leaved Lungwort*. Ra-  
dical leaves, lanceolate. *Ger.* 808. 2.  
*With.*

3. Maritima. *Sea Bugloss*. Calyx half the length  
of the tube of the corolla. Stem  
branched, procumbent, about two feet  
long. Leaves oval, on foot-stalks.  
Flowers, in the axæ of the leaves, pur-  
ple. July. P. On barren rocks on the  
coast. *Lightf.* vii. p. 134.

SYMPHYTUM. Calyx pentangular.  
Corolla rummer-shaped but long, with  
five

five segments in the rim, reflexed; tube very short, with five connivent rays in the opening, alternate with the stamina.

1. *Officinale. Comfrey.* Stem rough, round; green, branched, about two feet high. Radical leaves very large and rough; those on the stalk decurrent, alternate. Flowers in loose spikes, yellowish white, or purple. On the banks of rivers. P. July.

*Tuberosum.* A variety only.

BORAGO. Corolla the length of the calyx, with five segments horizontally expanded; tube short, the opening crowned by five obtuse, notched raddii. Seeds roundish, wrinkled.

1. *Officinalis. Borage.* Stem thick, hairy, round, branched. Leaves oval, broad, alternate. Calyces spreading. Flowers numerous, blue, single, on longish weak foot-stalks, in loose naked spikes on the tops of the branches. June, Aug. P. Among rubbish, high-roads, &c. Ger. 797. 2. S. Brit.

ASPERUGO. Calyx, whilst immature, tubular and quinque-dentate; when ripe, compressed, large, bivalve. Corolla funnel-shaped, small; tube closed by five prominent valves.

1. *Procumbens. German Mad wort, or small Wild Borage.* Stem angular, procumbent, branched, rough. Leaves on foot-stalks,

foot-stalks, obtuse, oval. Flowers single, purple. April, May. A. In roads, &c.

LYCOPSIS. Corolla funnel-shaped; the tube curved, and covered by five valves. Calyx becomes large and inflated.

1. *Arvensis*. *Small Wild Bugloss*. Stem very rough and harsh, branched. Leaves alternate, oval, harsh, waved, and irregularly cut on the edges. Flowers single, blue. Calyx hairy, divided to the base. June, Sept. Corn-fields, roads, &c. *Ger.* 799. 3.

ECHIUM. Segments of the calyx long and pointed. Corolla campanulate, with a very short tube; the two upper segments longest, the least segment acute and reflex; tube open, and wide at the top. Seeds obliquely pointed.

1. *Italicum*. *Wall Viper's Bugloss*. Stem erect, firm, about two feet high, branched, hairy. Leaves lance-shaped, sessile, numerous. Flowers in rough spikes; corollæ not quite regular, white, and scarce exceeding the calyx; stamina very long. July. P. On sandy soil.
2. *Vulgare*. *Viper's Bugloss*. Stem erect, single, about eighteen inches high, spotted with red, hairy, branched. Leaves numerous, alternate, lance-shaped, covered with bulbous hairs. Flowers first red, then blue, sessile, on unilateral curved spikes. July. P. Corn-fields, &c.

*Violaceum.*

*Violaceum.* Less, weaker, and more hairy.

\*\* *Corolla regular, of one petal below the germen.*  
*Seeds in a capsule.*

PRIMULA. Involuerum minute, of many leaves. Perianthium of one leaf, tubular, erect, with five sharp teeth, pentangular. Tube of the corolla cylindrical, pervious; segments five, obtuse, notched. Capsule cylindrical, unilocular, opening with ten teeth at the top. Seeds many.

1. *Vulgaris.* *Primrose.* Stalk naked, supporting a single pale-yellow flower. Leaves wrinkled, indented. April, May. P. *Ger.* 781. 5.

2. *Veris.* *Cowslips.* Stalk naked supporting several yellow sweet-smelling flowers. Leaves wrinkled, indented. April, May. P. In meadows. *Ger.* 780. 1.

*Great Cowslips.* Larger, paler, and without smell.

3. *Farinosa.* *Bird's Eye.* Leaves smooth, notched. Flowers like cowslips, but generally more numerous, and red. May. P. In the northern counties. *Ger.* 783. 1.

MENYANTHES. Corolla funnel-shaped, hairy, with five deep incisions; segments a little reflex; tube short, and widest at the top. Stigma bifid. Capsule unilocular.

1. *Nym-*

1. *Nymphoides*. *Fringed Water Lilly*. Stem creeping, and striking root in the mud. Leaves large, heart-shaped, single. Flowers large, yellow, on long foot-stalks, and fringed. June, July. In rivers, &c. P. S. Brit.
2. *Trifoliata*. *Buck-bean*, or *Marsh Trefoil*. Stem erect, about a foot high. Radical leaves oval, three on each foot-stalk. Flowers terminal, white, in clusters. June, July. Grows in fens. *Ger.* 1194.

**HOTTONIA.** Calyx with five deep incisions, the segments narrow, and a little erect. Corolla cup-fashioned, the tube inflated, segments five, obliquely cut and notched in the rim. Stamina short, on the top of the tube, and opposite the segments. Capsule globose, pointed, unilocular, on the calyx. Seeds many.

1. *Palustris*. *Water Violet*. Stalk long, creeping, and then erect. Leaves expanded on the water, pinnated, the pinnæ long, linear. Flowers white, on long foot-stalks, disposed in whirls, gradually less. July, August. P. In ditches, &c. frequent. S. Brit.

**LYSIMACHIA.** Calyx deeply cut, segments erect, acute. Corolla without tube, expanded; the segments long, oval. Capsule unilocular, with ten valves. Seeds many, angular.

1. *Vulgaris*. *Yellow Willow Herb*, or *Loofestrife*. Stem four or five feet high, branched, striated, hairy. Leaves pale, broad,

launce-shaped, three or four at each joint. Flowers yellow, several on each foot-stalk, in bunches, terminating the stem and branches. June, July. P. On the banks of rivers, &c. *Ger.* 474. 1.

2. *Thyrsoflora*. *Tufted Willow Herb*. Stem erect, not branched, striated, about a foot or more high. Leaves two at each joint, pale, and narrower than the last. Flowers yellow, on long foot-stalks, lateral, from the root of the leaves, in roundish, compact clusters, or tufts. June. P. On the banks of rivers, &c. but rare. *S. Brit.* *Ger.* 475. 3.
3. *Nemorum*. *Yellow Pimpernel of the Woods*. Flowers single, yellow, on lateral foot-stalks, from the axæ of the leaves. Stem procumbent, round, red. Leaves oval, pointed, on short foot-stalks. May, June. P. In moist woods, &c. *Ger.* 618. 4.
4. *Nummularia*. *Money-wort*. Flowers from the axæ of the leaves, single, yellow; incisions of the petal very deep. Stem creeping, quadrangular. Leaves, conjugate, in short pedicles, roundish. June. P. In moist meadows, &c.

ANAGALLIS. Corolla regular, expanded, without tube. Capsule globose, unilocular, opening transversely. Seeds several, angular. Receptacle globose, large.

1. *Arvensis*. *Male or Female Pimpernel*. Stem procumbent, angular. Leaves sessile, oval, pointed, in pairs. Flowers red, or blue, single, on conjugate foot-stalks, from

from the alæ of the leaves. May—August. A. In corn-fields. The female or blue pimpernel is a larger plant, and, I think, a distinct species. *Curt. pl. 12.*

2. *Tenella. Purple Moneywort.* Leaves oval, a little pointed. Stem creeping. Flowers pale purple, streaked. Stamina white, very hairy. *Curt. iii. 32.*

**AZALEA.** Corolla bell-shaped. Stamina inserted in the receptacle. Capsule 5—locular. Seeds many.

1. *Procumbens. Thyme-leaved A.* Branches diffuse, and trailing. On the tops of mountains in Scotland. *Lightf.*

**CONVOLVULUS.** Calyx small, irregular. Corolla bell-shaped, plaited, large, expanded, with five or ten notches in the rim. Stigmata two. Capsule bilocular, with two seeds in each.

1. *Arvensis. Small, or Gravel Bind-weed.* Stems numerous, weak, twisting, generally spreading on the ground. Leaves arrow-shaped, with three acute angles. Flowers reddish white, on foot-stalks, single. June, July. P. Fields, high-roads, &c. common. *Curt. ii. 20.*
2. *Sepium. Great Bind-weed.* Stems twisting, eight or ten feet long. Leaves heart-shaped, the two posterior angles being truncated. Flowers white, single, on long triangular foot-stalks. July, Aug. In hedges. *Curt. pl. 13.*



3. Soldanella. *Sea Bind-weed*. Stem prostrate. Leaves reniform. Flowers single, red. July. P. On the coast. Ger. 838. 1.

POLEMONIUM. Calyx with deep incisions. Corolla bell-shaped, but shallow, with five short, broad segments; the tube closed by five valves. Stamina inserted in the valves; antheræ incumbent. Stigmata trifid. Capsule ovato-conic, trivalve, trilocular. Seeds many.

1. Cœruleum. *Greek Valerian, or Jacob's Ladder*. Stem firm, erect, about two feet high, branched. Leaves pinnated; pinnæ eleven pair or more, with an odd one at the end. Flowers blue, in dense spikes, terminal. Ger. 1076. 5. S. Brit.

DATURA. Calyx tubular, pentangular, deciduous. Corolla funnel-shaped, almost intire, five-folded, pentangular. Capsule spinous, bilocular, quadrivalve. Seeds numerous.

1. Stramonium. *Thorn-apple*. Stem forked, spreading wide. Leaves, on long footstalks, smooth, oval, large, indented. Flowers single, large, white, in the divisions of the branches. Fruit erect. July. A. Among rubbish, &c. about London, frequent. Ger. 348. S. Brit.

ATROPA. Corolla campanulate, inflated; the opening at the top narrow, spreading. Stamina curved, diverging. Berry globose, bilocular. Seeds many.

1. Belladonna. *Deadly Night-shade, or Dwale*. Stem erect, forked, branched, three or four feet high. Leaves oval, intire, large,



large, hairy, soft, pointed. Flowers dead purple, numerous, on pedicles from the axæ of the leaves, single. Fruit, when ripe, a large black glossy berry. In woods, hedges, &c. June, July. P. Ger. 340.

SOLANUM. Corolla wheel-shaped; tube very short; limb large, plaited, semiquinquefid. Stamina minute; antheræ contingent, bursting at two pores in the apex. Berry bilocular.

1. *Dulcamara. Woody Night-shade.* Stem woody, slender, weak, climbing, six feet or more in length, not prickly. Upper leaves, on long foot-stalks, shaped like a halbert. Flowers, in loose bunches, purple, with two greenish spots at the base of each segment of the corolla; stamina yellow, forming a cone. Berry red. June, July. P. In hedges, frequent. *Curt. pl.* 14.
2. *Nigrum. Common Night-shade.* Stem herbaceous, branched, about a foot high. Leaves single, on long foot-stalks, alternate, dentato-angulated. Flowers white, on branched pedicles, drooping. Berries black. June, July. A. Among rubbish, &c.

CHIRONIA. Calyx and corolla with five segments, oval, equal. Stamina broad, short, from the top of the tube. Pistil declining. Antheræ at last spiral. Pericarpium bilocular. Seeds small, numerous.

1. *Centaurium. Less Centory.* Stem single, erect, forked, from six to twelve inches high. Leaves opposite, narrow, sessile, with three ribs. Flowers pale red, funnel-shaped, terminal, in clusters on the upper branches, which form a kind of umbel. Jun. A. In pastures. *Curt.* iv. 42.

VINCA. Corolla cup-fashioned, twisted; tube cylindrical below; limb horizontal, with five segments, obliquely truncated. Stamina very short, and bent. Style on a double germen. Stigmata two, one above the other. Pericarpium, two folliculi, erect, cylindrical, univalve.

1. Minor. *Periwinckle.* Stem woody, creeping, slender, crooked. Leaves long, oval, intire, pointed, opposite, glossy. Flowers single, on long curved pedicles from the axæ of the leaves, large, blue. May. P. In woods, hedges, &c. near Hampstead.
2. Major. *Great Periwinckle.* Stem woody, erect. Leaves broader and sharper pointed. Pedicles of the flowers straight, and calyx as long as the tube; otherwise like the former. May. P. In woods and hedges frequent.

\*\*\* *Corolla regular, of one petal above the germen.*

CAMPANULA. Corolla bell-shaped, closed at the bottom by five valves, bearing the stamina. Stigma trifid. Capsule below the flower, and opening by lateral pores. Seeds numerous, small.

1. *Rotundifolia.*

1. *Rotundifolia. Round-leaved Bell-flower.* Stem slender, scarce a foot high. Radical leaves roundish, on long pedicles; those on the stem long and narrow. Flowers large, terminal, on long foot-stalks, blue. Aug. P. On waste ground and barren pastures.
2. *Patula. Field Bell-flower.* Stem branched. Leaves stiff, lance-shaped. Panicle diffuse. A livid denticle on each side of the segments of the calyx. July, Aug. In woods and hedges. P.
3. *Rapunculus. Rampions.* Stem two or three feet high, angular, hairy, with many branches. Radical leaves tongue-shaped, obtuse, hairy; the rest narrow pointed, serrated. Flowers terminal, on short foot-stalks, blue. Aug. P. In fields, &c. but rare. Near Croydon in Surry. *Ger.* 453.
4. *Latifolia. Giant Throat-wort.* Stem single, round. Leaves broad, rough lance-shaped. Flowers single, on foot-stalks. Fruit drooping. July, Aug. P. In hedges, &c. In the mountainous parts of the north. *Ger.* 448. 3.
5. *Trachelium. Great Throat-wort, or Canterbury-bells.* Stem purplish, square, hairy, about two feet high, bending. Leaves, like those of the common nettle, rough, on foot-stalks. Flowers blue, generally three on each branch of a trifid pedicle, from the axæ of the leaves. Calyx fringed. July, Aug. P. Woods and hedges. *Ger.* 448. 1.
6. *Glomerata. Little Throat-wort.* Stem erect, angular, simple or but little branched,

and somewhat rough. Leaves rough; those at the bottom on foot-stalks. Flowers sessile, conglomerate, blue, reddish, or white, resting upon short, broad leaves. July. P. On hills, especially chalk. *Ger.* 449. 4.

7. *Hybrida*. *Less Venus, Looking-glass, or Podded Corn-violet*. Stem erect, divided near the root, angular. Leaves sessile, oblong, waved crenated. Flowers purple, expanded, from the axæ of the leaves, on pedicles; calyx aggregate, and longer than the corolla. Capsule a pod, prismatic. Corolla almost pentapetalous. June, July. A. In corn-fields, but rare. *Ger.* 439. 2.

8. *Hederacea*. *Ivy-leaved Bell-flower*. Stem four or five inches long, tender, procumbent, reddish. Leaves heart-shaped, with five lobes, smooth, on long foot-stalks. Flowers blue, on long slender pedicles. May, Aug. P. In moist shady places.

**SAMOLUS.** Corolla cup-shaped. Stamina covered by the scales of the corolla. Capsule unilocular, beneath.

1. *Valerandi*. *Round-leaved Water Pimpernel*. In marshy places. June. B.

**PHYTEUMA.** Corolla stellated, expanded, monopetalous, with five long, narrow, acute, recurved segments. Style the length of the corolla, curved. Stigma trifid. Capsule roundish, trilocular. Seeds many, small.

1. *Orbicularis*. *Horned Rampions*. Stem erect, simple, about a foot high, terminated by

by a round spike of purple flowers. Radical leaves heart-shaped, on long foot-stalks, the rest long, sessile, serrated. July. P. On downs. *Ger.* 445. 5.

\* *Corolla irregular of one petal.*

LONICERA. Calyx small. Corolla above the germen, tubular, quinquefid; segments revolute; tube gibbous. Fruit a berry with several seeds, bilocular.

1. *Periclymenum.* *Honeysuckle, or Woodbine.* A shrub; branches long, climbing. Leaves distinct, oval, smooth, obtuse. Flowers sessile, on oval imbricated heads, terminal. May, July. In hedges. *Curt. pl.* 15.

2. *Xylosteum.* *Upright Alpine Honeysuckle.* A low shrub, erect, bushy at the top. Leaves oval, pointed, hairy intire. Flowers white, two on each pedicle. Fruit two oblong red berries, which as they ripen run into one oval, striated berry. July. In the fissures of rocks. Under the Roman wall, on the west side of Shewing-Sheels, Northumb. *Wallis, p.* 149.

VERBASCUM. Corolla below the germen, with a very short tube, and five obtuse expanded segments. Stamina inclining, and downy at the base. Capsule roundish, bilocular, bivalve.

1. *Thapsus.* *Great White Mullein.* Stem single, simple, erect, covered with leaves, about six feet high. Leaves large, broad, white,

white, woolly on both sides, sessile, decurrent. Flowers terminal, in a long spike, sessile, yellow. July. B. In barren ground. *Ger.* 773. 1.

2. *Lychnitis*. *Hoary Mullein*. Stem two or three feet high, branched. Leaves oblong, pointed, wrinkled, mealy beneath, and notched round the edges. Flowers yellow, or white, on terminal and lateral spikes. July. B. Barren ground.
3. *Nigrum*. *Black Mullein*. Stem purplish, angular, about five feet high. Leaves oblong, serrated, dark green, &c. wrinkled on the upper side, on footstalks. Flowers yellow, with purplish antheræ; spike loose, terminal. July. P. High roads, &c. S. Brit. *Ger.* 775. 2.
4. *Blattari*. *Yellow Moth Mullein*. Stem simple. Leaves oblong, serrato-dentated, smooth, glossy, embracing the stem. Flowers, in thin spikes, on separate pedicels, yellow, large. June. A. On gravelly soils. *Ger.* 778. 7.
5. *Virgatum*. *Rodlike Mullein*. Downy. Radical leaves sub-lyrate. Stem leaves sessile. Stem branched. Peduncles collected, sessile. *With.*

HYOSCYAMUS. Calyx tubular, bellying at the bottom, quinquefid, permanent. Corolla below the germen, femiquinquefid, segments obtuse, one broader than the rest. Stamina inclining. Capsule bilocular, with a line on each side, and a cover on the top. Seeds numerous.

1. *Niger*.

1. Niger. *Henbane*. Stem firm, about two feet high, branched. Leaves very large, indented, surrounding the stem. Flowers sessile, large, brown and purple. June. A. High-roads, &c. Ger. 353. 1.

\* *Pentapetalous, regular, above the germen.*

RIBES. Calyx of one leaf. Corolla minute, erect, on the edge of the calyx. Stamina inserted in the calyx. Style bifid. Berry with many seeds.

1. Rubrum. *Currants*. A shrub about four feet high. Leaves serrated. Flowers green-white, in pendulous bunches. May. In woods, &c. in the north; also in gardens. Ger. 1593. 1.
2. Alpinum. *Mountain Currants*. A small shrub. Flowers in erect bunches, with floral leaves longer than the flowers. May. In hedges in Yorkshire, &c.
3. Nigrum. *Black Currants*. Flowers oblong; bunches hairy. Leaves have a strong smell. May. In moist woods and banks of rivers; also in gardens. Ger. 1593.
4. Uva-crispa. *Gooseberry*. Branches prickly. Berries or smooth or hairy. Ger. 1324.

HEDERA. Style simple. Berry with five seeds, encompassed by the calyx.

1. Helix. *Ivy*. A slender climbing shrub. Leaves lobed, glossy. Flowers in bunches. October. Curt. pl. 16.

\* *Corolla*



\* *Corolla* o.

ILLECEBRUM. Calyx, of five leaves, cartilaginous, coloured, below the germen. Stigma simple. Capsule quinquevalve. Seed one.

1. Verticillatum. *Verticillate Knot-grass*, or *creeping Milkwort*. Stalks several, jointed, spreading on the ground. Leaves short, oval, in pairs. Flowers, small, white, in whirls. July. P. In wet pastures, &c. in Cornwall, &c. *Ger.* 563.

GLAUX. Calyx of one leaf. Capsule unilocular, quinquevalve. Seeds five.

1. Maritima. *Sea Milkwort*, or *Black-Saltwort*. Stalks numerous, procumbent, jointed. Leaves sessile, in pairs. Flowers purple, in the axæ of the leaves. July. P. On the sea-shore. *Ger.* 562.

THESIUM. Calyx of one leaf, above the germen. Stamina inserted in the calyx. Seed 1, in the bottom of the calyx.

1. Linophyllon. *Bastard Tead-flax*. Stalks slender, striated, branched. Leaves long, narrow. Flowers white, small, on pedicles from the axæ of the upper leaves. June, Jul. P. On chalk hills. S. Brit.

RHAMNUS. Calyx tubular, quinquefid, coloured on the inside; with a minute scale at the base of each segment. Fruit a berry.

1. Frangula.



1. Frangula. *Black-berry bearing Alder*. A tall shrub, without spines. Inner bark yellow. Leaves roundish, pointed, intire. Flowers hermaphrodite. April, May. In woods and hedges.
2. Catharticus. *Buck-thorn*. Dioecia Hexandria.

## II. DIGYNIA.

Pistilla 2.

POLYGONUM. Vide 8—*andria Digynia*.

1. Amphibium. *Perennial Arsmart*. Stem slender, branched. Leaves long, narrow, with parallel nerves, slightly serrated. Flowers reddish, in dense spikes; stamina longer than the corolla. June, July. In fens and ditches frequent.

\* *Corolla* 0.

HERNIARIA. Calyx with five segments; spreading, coloured on the inside. Beside the five proper minute stamina, there are five sterile filaments. Style very short. Stigmata two. Capsule small. Seed one. S. Brit.

1. Glabra. *Smooth Rupture-wort*. Stems numerous, slender, branched, four or five inches long, spreading on the ground. Leaves in pairs, very small and pointed. Flowers minute, yellowish, in clusters along the stalks. July. A. Cornwall. Ger. 569.

2. Hirsuta.

2. *Hirsuta. Rough Rupture-wort.* Leaves hairy. June, July. A. In meadows, but rare. I think, a variety only.
3. *Lenticulata. Sea Rupture-wort.* Stems numerous, slender, branched, spreading on the ground. Leaves roundish, small. Flowers small, greenish, white, in bunches, terminal. On the sea-coast.

CHENOPODIUM. Calyx of five leaves; pentangular. Style short, divided. Stigmata obtuse. Pericarpium o. Seed one, lenticular.

\* *Leaves angular.*

1. *Bonus Henricus. English Mercury, or Allgood.* Stalks near two feet high. Leaves triangular, arrow-shaped, intire, oily, on long foot-stalks. Flowers greenish white, in spikes, terminal. August. P. Among rubbish, frequent. *Curt.* iii. 31.
2. *Urbicum. Upright Blite.* Stem erect. Leaves, on long foot-stalks, somewhat triangular, oblong, obtuse, slightly indented. Flowers greenish, in long, naked, slender, dense spikes, or bunches, branched, erect, from the axæ of the leaves. Aug. September. A. Among rubbish, &c.
3. *Rubrum. Sharp-leaved Goose-foot.* Stem erect. Leaves somewhat triangular, thick, glossy, sinuato-dentated towards the point. Flowers in reddish bunches, lateral, composite, erect, leafy. Aug. A. On dunghills, rubbish, &c. *Ger.* 328. 1.
4. *Murale.*

4. Murale. *Goose-foot, or Sowbane.* Stem erect, much branched. Leaves triangular, irregularly indented. Flowers in reddish bunches, lateral, naked, from the axæ of the leaves. Aug. A. In gardens, and among rubbish, &c. Ger. 328. 1.
5. Serotinum. *Late-flowering Blite.* Leaves triangular, wrinkled, smooth, uniform, with a deep sinus on each side, somewhat resembling those of the fig-tree. Flowers in bunches, terminal. August. Sept. A. On dunghills, rubbish, &c. frequent. Curt. ii. 18.
6. Album. *Common Orach.* Stem erect, about three feet high, branched. Leaves, on long foot-stalks, rhomboideo-triangular, irregularly indented towards the point, and mealy on the under side. Flowers in terminal bunches composed of alternate, sessile, thick spikes. Seed black, with a peculiar integument, distinct from the calyx. Aug. A. Curt. ii. 16.
7. Viride. *Green Blite.* Stem erect, green, purplish at the angles. Leaves rhomboidal, sinuated, dentated; those on the branches lance-shaped, entire. Flowers in long, slender, naked, divided spikes. A. In cultivated ground frequent.
8. Hybridum. *Maple-leaved Blite.* Leaves somewhat heart-shaped, with a few large angulated indentures, and a long point. Flowers in long, naked, branched bunches, lateral and terminal. August. A. Among rubbish, dunghills, &c. frequent. Curt. iv. 42.
9. Glaucum.

9. *Glaucum. Oak-leaved Blite.* Leaves ovate-oblong, cut round the edges in a waved line, downy beneath. Flowers in simple, naked, roundish bunches. Stem procumbent. August. A. On waste ground frequent.

\*\* *Leaves intire.*

10. *Vulvaria. Fætid Orach.* Stem branched, diffuse, procumbent. Leaves not large, rhomboidal, obtuse, meally. Flowers in small roundish bunches from the axæ of the leaves. Aug. A. In waste ground frequent. *Ger.* 327
11. *Polyispermum. Round-leaved Blite, or Alfeed.* Stem decumbent. Leaves oval. Flowers very numerous, small, in forked bunches. A. Frequent. *Curt.* ii. 20.
12. *Martimum. Sea Blite, or White Glasswort.* Leaves narrow, taper, plane above, convex beneath. A small whitish plant. Seeds glossy. Aug. A. On the sea-coast frequent. *Ger.* 535. 3.

BETA. Calyx of five obtuse concave leaves. Stamina the length of the calyx. Styles very short, erect. Capsule in the bottom of the calyx, unilocular. Seed one, reniform.

1. *Maritima. Sea Beet.* Flowers in pairs. Stem decumbent. Leaves large, triangular, vertical, or oblique, on long foot-stalks. Flowers terminal and lateral. August. B. On the coast frequent. This was supposed

supposed to be Dr. Letsom's celebrated *Mangel Wurzel*, which is now said to be the *Cicla*. Flowers the first year. Flowers grow in pairs. No dent at the base of the leaves of the calyx.

2. *Vulgaris*. *Common Beet*. Stem erect. Leaves horizontal. Calyx dentated at the base. Flowers congested.

SALSOLA. Calyx of five oval leaves. Stamina very short, in the leaves of the calyx. Stigmata curved. Capsule unilocular. Seed one, large, spiral.

1. *Kali*. *Prickly Glaſſwort*. Stem herbaceous, decumbent, rough. Leaves thick, narrow, taper, ending in a spine. Flowers greenish, in the axæ of the leaves; calyces with a leafy margin. July, Aug.  
A. On the coast frequent. *Ger.* 1117. 3.
2. *Fruticosa*. *Shrubby Glaſſwort*. Erect. Leaves filiform, bluntish. Aug. *Ger.* 523. 4.

ULMUS. Calyx like a top, wrinkled, with five segments, coloured on the inside. Stamina double the length of the calyx; styles shorter, reflexed. Fruit a dry berry.

1. *Campestris*. *Common Elm*. Leaves rough, oval, pointed, doubly serrated, unequal at the base. Bark of the trunk cracked and wrinkled. Fruit membranous. April. In hedges common.
2. *Montana*. *Wych Elm*. Leaves rough, oval, three inches by two, doubly serrated, unequal at the base. Bark of the younger branches smooth. Flowers when thirty feet high. *Ger.* 1481. 3. Mar. Generally thought a variety of the last.

\* *Corolla of one petal, regular, below the germen.*

SWERTIA. Calyx with five segments. Corolla with five segments, spreading, without tube. Two nectariferous pores at the base of each segment. Two stigmata without styles. Capsules three, unilocular, bivalve. Seeds numerous, small.

1. *Perennis. Marsh Gentian.* Radical leaves oval. August. In Wales. *Ger.* 433. 5.

GENTIANA. Calyx and corolla with five segments. Stigmata two, oval, without styles. Capsule oblong, cylindrical, pointed, unilocular, bivalve. Seeds numerous, small. Receptacula two, longitudinal.

1. *Pneumonanthe. Calathian Violet.* Stem erect, with few branches, near two feet high. Leaves narrow, opposite. Flowers blue, campanulate, erect, terminal, few, opposite, on short pedicles. August. P. In moist meadows.
2. *Amarella. Autumnal Gentian, or Fellwort.* Stems numerous, branched, about a foot high. Leaves opposite, sessile. Flowers cup-fashioned, bearded within, blue, terminal. July, Aug. A. In dry pastures.
3. *Filiformis. Least Gentian.* Corolla quadrifid, without beard. Stem filiform, forked.

\* *Flowers*

\* *Flowers with five Petals, regular, in umbels, with general and partial involucra.*

**ERYNGIUM.** Flowers in roundish heads. Receptacle conic, with paleæ between the sessile floscules. Involucrum of the receptacle of many leaves, erect, acute, exceeding the floscules. Proper perianthium of five leaves, erect, acute. Petals reflex. Stamina and styles longer than the corolla.

1. *Maritimum.* *Sea Holly*, or *Eryngo*. Root very long. Radical leaves roundish, folded, deeply indented, spinous, on long foot-stalks; those on the stem and branches sessile. Stem much branched. Flower-heads on pedicles. Flowers small, whitish. July, August. P. On the coast. *Ger.* 1162. 1.
2. *Campestre.* *Common Eryngo*. Root shorter than the last, and leaves narrower, pinnated, tripartite. Both plants are of a bluish green. July, August. In pastures near the sea. *Ger.* 1162. 2. S. Brit.

**HYDROCOTYLE.** Umbel simple. Involucrum of four leaves. Petals oval, acute, intire, spreading. Seeds two, compressed.

1. *Vulgaris.* *Marsh Pennywort*, or *White-root*. Stem creeping, jointed. Leaves single, on long foot-stalks, fixed on the center, round, with eight nerves and eight scallops. Umbels of five flowers, which are small, and reddish white. May. P. In wet pastures. *Ger.* 529. 3.



**SANICULA.** General umbel of about four radii ; the partial of many, closed, so as to form a kind of knob. General involucrum but half round. Floscules of the disk abortive. Stamina twice the length of the corolla. Fruit rough. Seeds two.

1. *Europæa. Sanicle.* Stem erect, naked. Radical leaves numerous, on long footstalks, trilobed, indented ; the side lobes divided. Floscules all sessile. *Ger.* 948.

**BUPLEURUM.** General umbel with less than ten radii. Partial involucrum of five leaves, large. Floscules all fertile. Petals very short, involuted. Fruit roundish, compressed, striated, divisible. Seeds two. *S. Brit.*

1. *Rotundifolium. Thorough-wax.* Stem erect, about two feet high, branched. Leaves single, each surrounding the stem, oval, pointed, glossy, bluish-green. Flowers yellowish. No general involucrum. July. A. In corn-fields. *Ger.* 536. 1.
2. *Tenuissimum. Least Hare's Ear.* Stem about a foot high, with many branches. Leaves long, narrow, pointed, sessile. Umbels simple, alternate. Flowers small, yellowish. July, Aug. A. In pastures, rare.

**BUNIAM.** General umbel of less than twenty radii ; partial umbel very short, but thick set. General involucrum of many leaves, linear, short ; partial involucrum.



lucrum like bristles, as long as the umbel. Fruit oval, divisible. Seeds two.

1. *Bulbocastanum*. *Earth Nut, Pig Nut, or Jar Nut*. Root bulbous, brown on the outside. Stems smooth, about a foot high. Radical leaves long, on foot-stalks, pinnated; pinnæ and pinnulæ branched, the extreme lobule lance-shaped. Upper leaves much finer, vaginated: all smooth, glossy. Flowers small, white. *Ger.* 1064. 2.
2. *Flexuosum*. *Less Pig Nut*. Stem from the base tapering downward zigzag. General involucre of many leaves, linear, small, reflex; partial less. Styles small. Fruit oval, girt by a membrane. Seeds two, oblong, furrowed, girt by a membrane. *S. Brit.*

**PEUCEDANUM.** General umbel of many, long, slender radii. Partial umbel flat. General involucre of many leaves, linear, small, reflex; partial less. Styles small. Fruit oval, girt by a membrane. Seeds two, oblong, furrowed, girt by a membrane. *S. Brit.*

1. *Officinalis*. *Hog's Fennel*. Stem erect, jointed, branched, two or three feet high. Leaves 5-tripartite, linear, filiform. Umbels large. Flowers small, yellowish. June. *P.* In salt fens. *Ger.* 1054. 1.
2. *Silaus*. *Meadow Saxifrage*. Stem erect, branched, about two feet high. General involucre of two leaves. Leaves decomposite; folioles pinnatifid, segments opposite, dark green on the upper side. Petals yellowish, revolute, divided by a middle line. Seeds large, with three deep furrows. Aug. *P.* In moist meadows, *Ger.* 1048. 2.

**CRITHMUM.** General umbel of many radii, hemispherical. Partial umbels con-  
fimilar. General involucre of many  
leaves, obtuse, reflex; partial, the length  
of the umbels. Fruit oval, compressed,  
divisible. Seeds two, elliptical, striated  
on one side.

1. *Maritimum.* *Sampire.* Stem much branched,  
about a foot high. Radical leaves large,  
with long, narrow, thick segments.  
Flowers yellow, on large umbels. Aug.  
P. On the sea-coast. *Ger.* 533. 1.

**LIGUSTICUM.** General and partial  
umbels of many radii. General involu-  
cre membranous, of seven leaves, un-  
equal; partial of three or four leaves.  
Petals involuted, intire. Fruit oblong,  
5-furrowed. Seeds two, large, long,  
with membranes on one side.

1. *Scoticum.* *Scottish Sea Parsley.* Stem two or  
three feet high, erect, striated, branched  
at the top. Leaves biternate. Flowers  
small, white. July. B. On the sea-  
coast, but rare.
2. *Cornubiense.* *Cornwall Saxifrage.* Stem three  
or four feet high, branched. Leaves de-  
composite, cut in at the edges; the radi-  
cal ones ternate, lance-shaped, intire.  
July. P. S. Brit.

**ANGELICA.** General umbel of many  
radii, roundish. Partial umbel, when  
flowering, perfectly round. General  
involucre of three or five leaves, small.  
Partial umbel small, of eight leaves.  
Fruit

Fruit roundish, angular, solid, divisible.  
Seeds two.

1. *Silvestris*. *Wild Angelica*. Stem erect, branched, five or six feet high. Leaves large, on vaginal foot-stalks, composed of pinnated foliolæ, serrated, somewhat oval, umbel large. Flowers small, greenish white. June, July. P. In woods, hedges, &c. *Ger.* 999. 2.

SIUM. Partial umbel spreading. General involucre of five—seven leaves, broad, reflex; partial, about the same number, but narrow. Fruit, roundish, striated, small, divisible. Seeds two. Petals heart-shaped.

1. *Latifolium*. *Great Water Parsnep*. Stem erect, branched, five or six feet high. Leaves pinnated, broad, serrated. General involucre 0. Umbels terminal. Flowers small, white. July. P. Rivers, fens, &c. *Ger.* 256. 1.
2. *Nodiflorum*. *Creeping Water Parsnep*. Stem weak, creeping. Radical leaves pinnated, simple; those on the stalk semitri-lobed, and sharp-serrated. Umbels some on short pedicles from the axæ of the leaves, and others on longer ones and terminal. July, Aug. P. Rivers and ditches.
3. *Angustifolium*. *Narrow-leaved Water Parsnep*. Leaves pinnated; pinnæ lobed, second pair distant from the first. Umbels axillary, pedunculate, opposite the leaves, and terminal. June, July. P. *Ger.* 256. 2. *With.* S. Brit.

SISON. General umbel of less than six, and partial less than ten radii, unequal. Involucra each of four leaves, unequal. Fruit oval, striated, divisible. Seeds two.

1. Amomum. *Bastard Stone Parsley*. Stem tall, slender, weak, branched. Leaves pinnated, serrated. Umbels erect, terminal. Seeds warm, aromatic. Aug. Sept. P. In woods and hedges. Ger. 1016. 1, S. Brit.
2. Segetum. *Corn Parsley*, or *Honeywort*. Stems numerous, slender, striated, branched, leaning. Leaves pinnated; pinnæ oval, pointed, serrated, six or eight pair, and one at the end. Umbels small, drooping. Flowers minute, white. July. B. Corn-fields, and hedges, &c. Ger. 1018.
3. Inundatum. *Least Water Parsnep*. Stem about eight or ten inches high, branched, creeping. Leaves, below the water, capillary; above, pinnated. Umbels bifid. May, June. A. Ditches, ponds, &c. frequent.
4. Verticillatum. *Verticillate Sison*. Small leaves in whirls, capillary. Stem 2 feet, with few leaves. Common umbel of 8 or 10 rays; partial 18 or 20. Both involucra of 5 or 6, oval, acute, foliola. Flowers all hermaphrodite, petals white. *Lightf. Append.*

\*\* Involucra 0.

PASTINACA. General and partial umbels of many radii. Petals curled inwards, lance-shaped, intire. Fruit elliptical,

elliptical, compressed. Seeds two, elliptical, with a margin. S. Brit.

1. *Sativa. Parsnep.* Stalk branched, jointed. Leaves pinnated, simple, serrated. Umbels large. Flowers yellow. July. B. In the borders of common fields. *Ger.* 1025. 1.

SMYRNIUM. General umbel unequal, daily increasing; partial umbel erect. Petals carinated. Fruit oblong, striated. Seeds two, triangular.

1. *Olusatrum. Alexanders.* Stem firm, jointed, striated, branched, three or four feet high. Radical leaves triternate; those above, ternate only; both serrated. Umbels very large. Flowers greenish white. May, June. B. In ditches, and about rocks near the sea. *Ger.* 1019.

ANETHUM. General and partial umbels of many radii. Petals curled inwards, minute, intire. Styles obsolete. Fruit somewhat oval, compressed, striated. Seeds 2, without a membranous margin.

1. *Fœniculum. Fennel.* Stem round, thick, firm. Leaves divided into a multitude of long narrow segments. Flowers yellow. Aug. B. On chalk cliffs, frequent. S. Brit. *Ger.* 1032.

CARUM. General umbel long, of ten radii, often unequal. Partial umbels crowded. Petals sometimes a little irregular, heart-shaped, ridged, and cut in the

the margin. Fruit ovato-oblong, striated. Seeds two, convex on one side, plane on the other, striated.

1. Carvi. *Carraways*. Root conic. Stem branched, about a foot high. Leaves long, bipinnated; first pinnulæ decussate on the rib. Umbels terminal. Flowers white. May, June. B. Meadows, &c. frequent. *Ger.* 1034.

PIMPINELLA. General umbel of many radii; partial, of yet more. Petals of the exterior flowers irregular. Styles very short. Fruit ovato-oblong. Seeds two, convex, striated.

1. Saxifraga. *Burnet Saxifrage*. Stem slender, much branched, about two feet high. Leaves pinnated, serrated; those from the root roundish; upper leaves in five long narrow segments. Aug. P. In dry pastures. *Ger.* 1044. 2.
2. Magna. *Great Burnet Saxifrage*. All the leaves lobed; the odd one 3—lobed. Leaves pinnated. Stem furrowed, three feet high. Flowers white. *Ger.* 1044. 1. Aug. Sept. A.

\* Vide *Dioecia Pentandria*.

APIUM. Universal umbel of few radii; partial, of many. Petals roundish, inflexed. Fruit oval, striated. Seeds two, oval, striated on one side.

1. Graveolens. *Smallage*. When cultivated in gardens, *Celery*. Stem erect, hollow, angular, branched. Radical leaves, on long pedicles, pinnated; pinnæ divided into

into three lobes, and serrated. Upper leaves wedge-shaped. Aug. B. In fens and ditches.

**ÆGOPODIUM.** General umbel of many radii, convex; partial, of many radii, plane. Petals heart-shaped, the exterior ones not regular. Fruit ovato-oblong, striated. Seeds two, large.

1. *Podagraria.* *Herb-Gerard, Gout-weed, or Ash-weed.* Stem angular, branched, about three feet high. Leaves on triangular pedicles. Radical leaves biternate, with broad sessile foliolæ; those above ternate, with the foliolæ on pedicles. Umbels few, large. Flowers white. In gardens frequent. *Ger.* 1001. 2.

\* *Petals five, irregular. Umbels with general and partial involucra.*

**ECHINOPHORA.** General umbel with intermediate shorter radii. Partial umbel with sessile floscules, several abortive. Partial involucrum of one leaf, with six segments, acute, unequal. Seed one, immersed in the involucrum.

1. *Spinosa.* *Prickly Sampire, or Sea Parsnep.* Stem erect, branched. Leaves pinnated; pinnæ thick, with a single furrow, and tapering to a rigid spine. Root like that of the common parsnep, but more branched. July. P. On the sea-coast. *Ger.* 533. 2.

**TORDYLIUM.** General and partial umbels of many unequal radii; those of the latter very short. Involucra long, simple. Floscules



Flores all hermaphrodite. Corollæ radiate. Fruit roundish, notched in the margin. Seeds two.

1. *Officinale. Small Heart-wort.* Partial involucre as long as the flowers. Little leaves oval, jagged. Florets purplish. Seeds large, flat, their edges notched.

**CAUCALIS.** General umbel with few, and those unequal radii. Partial umbel with more radii, of which the five exterior are largest. Corollæ radiate, those of the disk male. Fruit spinous.

1. *Daucoides. Small Hen's-foot.* Stem straggling, angular, scored, hairy. Umbels quinquefid or trifid. Partial umbels sessile, generally three, with three seeds and three leaves. General involucre 0. Florets not radiate, reddish. Prickles of the seeds smooth. *Park. 920. 6. With.*
2. *Latifolia. Broad-leaved Hen's-foot.* General umbel trifid; partial, with five seeds. Leaves pinnated, serrated. Stem angular, striated, and like the whole plant rough, with flat prickles. Flower purplish. June, July. In corn-fields.
3. *Anthriscus. Hedge Parsley.* Umbel dense. Small leaves, oval, pinnatifid. Branches erect. In hedges. *Ger. 1022. 5. Aug. P. Lightf.*
4. *Arvensis. Corn Parsley.* Common involucre of one leaf. Umbel dense. Branches diffuse. Seeds and small leaves sub-oval. July, Aug. *A. Hudf.* Leaves pinnatifid. Flowers white.

5. *Nodosa.*



5. *Nodosa*. *Knotted Hen's-foot*. Umbels lateral, sessile, simple at the knots of the stem. Rays unequal. *Huds. Ger.* 1022. 6. May, July. A.

DAUCUS. General and partial umbel of many radii, concave. General involucre of many leaves, as long as the umbel, with linear, pinnated leaves. Partial involucre more simple. Flowers all hermaphrodite. Fruit prickly.

1. *Carota*. *Wild Carrot*, or *Bird's-nest*. Stem erect, solid, branched, three or four feet high. Root smaller and harder than the garden carrot. Leaves hairy, and doubly divided into fine segments. Seeds prickly. *Ger.* 1028.

CONIUM. Umbels of many radii, spreading. Involucra of many leaves, very short, unequal. Fruit roundish, with five striæ, notched.

1. *Maculatum*. *Hemlock*. Stem erect, jointed, spotted, branched, five or six feet high. Leaves bipinnated; folioles divided into about seven segments, the last obtuse. Seeds striated. June, July. A. In hedges, frequent. *Curt. pl.* 17.

ATHAMANTA. General umbel of many radii; partial fewer. Involucra of many leaves, linear. Fruit ovato-oblong, striated.

1. *Libanotis*. *Mountain Stone-parsley*. Root acrid, conic, aromatic. Stem sometimes very short, and sometimes near two feet high.

high. Leaves large, bipinnated, resembling those of parsley. Umbellulæ very numerous. Umbels hemispherical. Seeds hairy. Aug. Sept. P. In dry pastures.

2. *Oreoselinum*. *Stradling Spiguel*. Small leaves divaricated, oval, pointed. Pinnæ cut, not ferrated. *Huds.* Jul. Aug. P. Dry meadows. *Ger.* 1015.

**HERACLEUM.** General umbel large, of many radii. Involucra deciduous. Exterior petals much larger, and notched. Fruit elliptical, compressed, striated. Seeds two, with four striæ, foliaceous.

1. *Spondylium*. *Cow Parsnep*. Stem hollow, striated, branched, about five feet high. Leaves hairy, large, pinnatifid, quinquefid, with lobes irregularly notched. Flowers hairy, white or reddish, all hermaphrodite. July. B. Hedges, pastures, &c. frequent. *Ger.* 1009.
2. *Angustifolium*. *Jagged Cow Parsnep*. Differs from the last, in the leaves being pinnated crosswise, the foliolæ much narrower, and the corolla greenish, and more regular. *Syst. Nat. Append.* 57. Is this a variety of the last?

**OENANTHE.** General umbel of few radii; those of the partial umbel numerous, very short or none. Involucra of many leaves, simple. Floscules sessile; those of the disk sterile. Fruit crowned by the calyx.

1. *Fistulosa*.

1. *Fistulosa. Water Dropwort.* Stem creeping under water; above water erect, and almost naked. Radical leaves bipinnated; those on the stem pinnated, linear, fistulous. Partial umbels dense, generally three together. July. P. In fens and ditches frequent. *Ger.* 1060.
2. *Crocata. Hemlock Dropwort.* Stem branched, striated about four feet high. Leaves multifid, large, obtuse. Radii of the general umbel angular. General involucre large. Flowers white. Jun. P. On the banks of rivers. *Ger.* 1059. 4.
3. *Pimpinelloides. Pimpernel Dropwort.* Stem about six inches high, angular. Radical leaves bipinnated, resembling those of parsley; those above simple, linear, channelled, long. Umbel unequal. Flowers white. In fens and ditches. June. P. S. Brit.

\*\* *General Involucrum* o.

**PHELLANDRIUM.** Umbels of many radii. Partial involucre of seven leaves, acute, and as long as the umbel. Flowers of the disk less. Fruit smooth, oval, crowned by the calyx and pistillum.

1. *Aquaticum. Water Hemlock.* Stem very thick, hollow, striated, six feet high, branched. Lower leaves decomposite; upper bipinnated, their ramifications divaricated, and segments narrow. Umbel not very large. Seeds oval, compressed slightly, aromatic. Jun. B. In rivers, ditches, &c. *Ger.* 1063.

CICUTA.

CICUTA. Umbels roundish, of many equal radii. Partial involucre of many leaves, short, narrow. Fruit oval, furrowed. Petals nearly equal.

1. Virosa. *Long-leaved Water Hemlock*. Stem three or four feet high, striated, branched. Leaves large, with seven pair of pinnæ, long, slender, variously divided, indented, on leafy pedicles. July. P. In shallow pools of water. Poisonous. *Ger.* 256. 4.

ÆTHUSA. General umbel spreading; inner radii gradually less. Partial umbels small, spreading. Partial involucre, on the out-side only, of three or five long, linear, pendulous leaves. Fruit striated. Petals bifid.

1. Cynapium. *Fool's Parsley*. Stem furrowed, branched, two or three feet high. Leaves pinnated, smooth, glossy, large, subdivided into narrow segments, somewhat resembling those of hemlock. Aug. Sept. A. In corn-fields, and a frequent weed in gardens. *Curt. pl.* 18.
2. Meum. *Spignel*. Stem round, branched, striated. Leaves alternate, divided into long capillary segments; those from the root on long pedicles, soft. Flowers white. Seeds striated. May. P. Mountainous parts of the North, and in Wales. *Ger.* 1052. 1.

CORIANDRUM. General umbel of few radii; partial of many. Partial involucre, on one side only, of three linear

linear leaves. Corolla radiate; petals inflexed, notched. Fruit spherical.

1. *Sativum. Coriander.* Stem two or three feet high, branched. Leaves divided into many narrow segments; the lower leaves broader, pinnated. Root white. The whole plant when bruised smells very disagreeably. Jun. A. Dunghills, high-roads, &c. *Ger.* 1012. 1. 2. S. Brit.

SCANDIX. General umbel long, of very few radii. Partial involucre of five leaves, as long as the umbel. Petals intire. Fruit long, narrow, taper. Floscules of the disk generally male.

- . *Pecten Veneris. Shepherd's Needle, or Venus-comb.* Stem about a foot high, branched. Leaves divided into many narrow segments. Fruit above an inch long. Radii of the general umbel only two. Leaves of the involucre bifid. June, July. A. Corn-fields, frequent.

- . *Anthriscus. Hemlock Wild Chervil.* Stem about two feet high, branched, smooth. Leaves pinnated, resembling those of hemlock, but with shorter and broader pinnæ. Seeds oval, rough. Petals equal. May, June. A. In corn fields and high-roads frequent. *Curt.* i. 19.

- . *Odorata. Great sweet Chervil, or Myrrh.* Leaves triply pinnated, hairy, scented. Stalks channelled and fistular. Flowers white. Seeds furrowed, angular. May. P. *Ger.* 1039. 3.

- . *Cerifolium. Chervil.* Seeds glossy, long-oval. Stem smooth. Florets sessile. *Ger.* 1038. Found near Worcester. *With.*

**CHEROPHYLLUM.** General umbel, spreading; partial umbel of nearly the same number of radii. Partial involucre of about five leaves, broad, concave, reflex. Petals roundish, intire. Fruit oblong, smooth.

1. Sylvestre. *Wild Cicely, or Cow-weed.* Stem hairy, thick, hollow, branched, striated. Leaves very large, bipinnated; pinnulæ broad, divided into four or five segments, hairy. Flowers all hermaphrodite. Exterior leaf of the partial involucre much larger than the rest. May, June. A. In hedges. *Curt.* iv. 25.
2. Tumulum. *Wild Chervil.* Stem spotted, branched, rough; joints swollen. Leaves hairy, large, bipinnated; pinnulæ narrow, and regular like fern. Umbels drooping. Floscules of the disk male. Seeds broad, yellow, striated. Interior petal cordated. Jul. Aug. A. In hedges frequent. *Ger.* 1038. 2.

**IMPERATORIA.** General umbel flat, expanded; *partial* unequal. Common involucre 0; *partial* of one or two leaves. Florets of five petals, bent in, notched. Fruit roundish, compressed, gibbous in the middle, bordered.

1. Ostruthium. *Masterwort.* Leaves with about five pinnæ, the end one in 3 lobes. On waste ground in Scotland, frequent. June. P. *Lightf.* *Ger.* 1001. 1.

## III. TRIGYNIA.

Pistilla 3.

\* *Corolla monopetalous, regular, above the germen.*

VIBURNUM. Calyx quinquedentate, small, permanent. Corolla campanulate, with five segments, obtuse, reflex. Styles 0, but a turbinated glandule instead. Fruit a berry, with a single osseous seed.

1. Lantane. *Way faring, or pliant meally Tree.* A small tree, with whitish pliant twigs. Leaves in pairs, oval, pointed, serrated, venous, meally on the under side. Flowers white, in umbels, terminal. Fruit black. May. In hedges. *Ger.* 1490.

2. Opulus. *Water Elder, or Guelder-rose.* A weak shrub, about six feet high. Leaves, on glandular foot-stalks, divided into three or five lobes, serrated, resembling vine-leaves. Flowers large, white, in umbels. Berry red. May, June. In woods and hedges. *Ger.* 1424. 1.

SAMBUCUS. Calyx of one leaf, small, in five segments, permanent. Corolla with five segments, obtuse, reflex. Styles 0, but a tumid glandule. A berry with three seeds.

1. Nigra. *Common Elder.* A shrub, or small tree from six to fifteen or twenty feet high. Branches full of pith. Leaves pinnated, serrated. Flowers white, in large umbels, or rather cymes, quinque-partite. Fruit black. April. In woods and hedges.

H 2

2. Ebulus.



2. *Ebulus*. *Dwarf Elder, Wallwort, or Danewort*. An herb, about three feet high. Leaves and flowers like the last, but the leaves are somewhat longer. Cymes tripartite. June, July. Hedges. *Curt.* iii. 18.

\*\* *Corolla pentapetalous, regular, below the germen.*

STAPHYLEA. Calyx of five segments, concave, coloured, equal with the corolla, the petals of which are erect, acute. Capsules three, inflated, joined together by a longitudinal future. Seeds two, globose, with a cicatrix.

1. *Pinnata*. *Bladder Nut Tree*. A tall shrub, or tree; shoots pithy. Leaves pinnated; pinnæ generally five, oblong, pointed, and notched round the edges. Flowers white, in whirls, on long pendulous pedicles. June. In hedges about Pontefract, and in Kent. *Ger.* 1437. *S. Brit.*

ALSINE. Calyx of five concave, pointed leaves. Petals bifid. Capsule unilocular, trivalve. Seeds several, roundish.

1. *Media*. *Common Chickweed*. Stem weak, branched. Leaves elliptical, pointed, in pairs. Flowers small, white. Stamina uncertain as to number, three, seven, five, or ten. April to October, frequent. *Curt.* i. 20.

#### IV. TETRAGYNIA.

Pistilla 4.

PARNASSIA. Calyx in five segments, acute, spreading, permanent. Petals five, regular, notched, striated. Nectaria,



PENTANDRIA. PENTAGYNIA. 101

taria five, fringed, apex globose. Styles 0. Stigmata four. Capsule unilocular, quadrivalve.

1. *Palustris*. *Grass of Parnassus*. Stem square, about six inches high. Radical leaves on foot-stalks. Flower long, single, large, white, terminal. Aug. P. In wet meadows. *Ger.* 840. 1.

V. PENTAGYNIA.

Pistilla 5.

\* *Petals five, regular, below the germen.*

STATICE. Calyx of one leaf, funnel-shaped, folded, intire. Seed one.

1. *Armeria*. *Thrift*, or *Sea Gilly-flower*. Stem simple, naked, about six inches high. Radical leaves like grass, in a large tuft. Flowers terminal, pale red, in a round head, not very large. July, Aug. P. In meadows near the sea. *Ger.* 602. 1.
2. *Limonium*. *Sea Lavender*. Stem naked, branched, about a foot high. Radical leaves long, thick, pointed, on foot-stalks. Flowers blue, in long spikes or panicles on the tops of the branches. July, Aug. P. On the sea-coast. *Ger.* 411. 1. *S. Brit.*
3. *Reticulata*. *Matted Sea Lavender*. Stem prostrate, terminated by a panicle of flowers. Branches bent backwards, interwoven. Leaves wedge-shaped. On the sea-coast. *S. Brit.*

LINUM. Calyx small, of five leaves, erect, permanent. Petals five, obtuse, large. Capsule globose, decemlocular, quinquevalve. Seeds single.

1. Usitatissimum. *Flax*. Stem erect, about three feet high, branched, hollow. Leaves narrow, pointed, alternate, intire. Flowers blue; calyx angular; capsule pointed. Seeds brown, glossy. June. A. In corn-fields. *Ger.* 556. *Curt.* v. 22.
2. Perenne. *Perennial Blue Flax*. Stem about a foot high. Leaves numerous, narrow, pointed, alternate, intire. Capsules and segments of the calyx obtuse. Flowers blue, in thick tufts, terminal. June, July. P. In barren pastures. *S. Brit.*
3. Tenuifolium. *Narrow-leaved Wild flax*. Stalks numerous, erect, woody, about a foot high, branched. Leaves irregular, narrow, pointed, rough. Flowers large, terminal, on pedicles, single, blue or reddish, with purple lines; calyx sharp-pointed, fringed. June, July. P. In fields near the sea.
4. Catharticum. *Purging Flax*. Stem about eight inches high, generally bent, forked towards the top. Leaves oval, pointed, opposite, small, sessile. Flowers white, sharp pointed, terminal, small. May, June. A. In dry fields. *Curt.* iii. 19.
5. Radiola. Vide *Tetrandria Tetragynia*.

DROSEREA. Calyx of one leaf, quinquefid, pointed, erect, permanent, a little less than the corolla. Capsule oval, unilocular, with five valves at the apex. Seeds numerous, minute.

1. *Rotundifolia. Round-leaved Sun-dew.* Stem naked, about four inches high. Leaves concave, round, on pedicles fringed and covered with red hairs, and sprinkled with drops of a transparent fluid. Flowers white, on spikes chiefly unilateral. Jul. Aug. P. On bogs, &c. *Ger.* 1556. 1.
2. *Longifolia. Long-leaved Sun-dew.* Differs from the last in being a somewhat larger plant, and in the elliptical shape of the leaf. *Ger.* 1556. 2.
3. *Anglica. English Sun-dew.* Differs from the last in being a larger plant, and in the capsule having four valves only. Bogs among moss. These three species are, I think, varieties only. The leaves being irritated by the feet of any insect, curl up and secure it as in a trap.

SIBBALDIA. Calyx of one leaf, with ten segments. Petals and stamina inserted in the calyx. Styles from the side of the germens. Seeds five.

1. *Procumbens. Bastard Cinquefoil.* Stem procumbent. Leaves three, on the top of a small pedicle, trifid at the extremity, and somewhat hairy. Flowers yellow. July, Aug. P. N. Brit.

SPERGULA. Vide *Decandria Pentagynia*.

1. *Pentandria. Small Spurrey.* Leaves very narrow, in whirls at the joints. Seeds black, with a white circle. July. A. In Ireland.

## VI. POLYGYNIA.

Pistilla many.

MYOSURUS. Calyx of five leaves. Nectaria five, narrow, pointed, resembling petals. Seeds numerous, fixed to a long receptaculum. Germens numerous. Styles 0. The number of the stamina not to be depended on.

1. Minimus. *Mousetail*. Stalks simple, about three inches high. Radical leaves numerous, like grass. Flowers small, greenish. Receptaculum about two inches long, cylindrical, like that of the plantain, but not so thick. April, May. A. In meadows, &c. *Curt.*

CLASS

CLASS VI.

HEXANDRIA.

Stamina 6.

I. MONOGYNIA.

Pistillum 1.

**GALANTHUS.** Spatha oblong, forked, compressed. Corolla of three petals, oblong, blunt, concave, equal. Nectarium cylindrical, of three petals, parallel, notched. Stigma simple.

1. *Nivalis.* *Snow-drop.* Ger. 147. Mar. Apr. P.

**FRANKENIA.** Calyx of one leaf, angular, with five sharp teeth, spreading, permanent. Corolla of five petals, roundish, spreading. Stigmata three. Capsule oval, unilocular, trivalve. Seeds many, oval, minute.

1. *Levis.* *Smooth Sea Heath.* Stems numerous, branched, procumbent. Leaves small, linear, fringed at the base. Flowers purple, single, sessile. Aug. P. On the sea-coast. Ger. 566. 3.

2. *Pulverulenta.* *Broad-leaved Sea Heath.* Differs from the last in the leaves being oval, with a blunt apex, and meally on the under-side. July. A. On the sea-coast. Ger. 566. 2.

**JUNCUS.** Calyx of six leaves. Glume bivalve. Corolla 0. Capsule unilocular, trivalve, triangular. Stigmata three, long, woolly.

\* *Stalks*

\* *Stalks naked.*

1. *Acutus*. *Hard Sea Rush*. Stem hard, sharp-pointed, terminated by a panicle of roundish heads. July, Aug. P. On the sea-coast. S. Brit.
2. *Conglomeratus*. *Round-headed Rush*. Stem rigid. Head compact and lateral. July. Aug. P. Bogs and wet pastures. *Park*. 1191. 3.
3. *Effusus*. *Common soft Rush*. Flowers on pedicles. Panicle lateral, diffuse. May—Aug. P. Fens, &c. *Ger*. 35. 1.
4. *Inflexus*. *Hard Rush*. Stem with the apex membranous and curved. Panicle diffuse, lateral. Jun. In pastures, &c. *Ger*. 35. 4.
5. *Filiformis*. *Least soft Rush*. Stem short, slender, drooping. Panicle distant from the top. On boggy mountains. S. Brit.
6. *Squarrosus*. *Moss Rush*, or *Goose-corn*. Leaves very narrow. Heads round, terminal, naked. June. In waste ground frequent. *Ger*. 21. 4.
7. *Trifidus*. *Trifid Rush*. Stalk terminated by three leaves, and flowers. *Lightf*. p. 188. June. Bogs on the tops of the Highland mountains in Scotland.

\*\* *Stalks leafy.*

8. *Articulatus*. *Jointed-leaved Rush*. Leaves jointed. Heads sessile. July, Aug. In wet ground. *Ger*. 22. 9.
9. *Bulbosus*. *Bulbose Rush*. Root dense, creeping. Leaves narrow. On the upper side grooved, on the under convex, striated. Panicle

Panicle unequal, terminal. Capsule brown, shining. Aug. In moist ground frequent.

10. *Bufonius*. *Toad Rush*. Stem forked. Leaves angular. Flowers sessile, single, with white vaginæ. July, Aug. A. In sandy pastures, &c.
11. *Pilosus*. *Hairy Wood Rush*. Stem about two feet high. Leaves somewhat broad and hairy. Panicle branched. April, May. In thick woods. *Ger.* 19. 1. *Curt.* v. 25.
12. *Sylvaticus*. *Great Hairy Wood Rush*. Leaves broader, more concave and more pointed than the last. May. *Curt.* v. 26.
13. *Campestris*. *Small Hairy Wood Rush*. Stem not so tall as the last. Leaves narrower, and spikes more compact. April. In dry pastures, &c. *Curt.* ii. 19.
14. *Biglumis*. *Two-flowered Rush*. Flowers terminal. Leaf subulate. Stalk one or two inches high, cylindrical. Glume and petals dark purple. Aug. P.
15. *Triglumis*. *Three-flowered Rush*. Leaves flat, vaginal. Stem simple, leafless. Flowers sessile, terminal. Glume and capsules chocolate. June, Aug. P. Bogs on mountains. *Lightf* 188.

\* *Monopetalous, regular.*

CONVALLARIA. Calyx o. Corolla bell-shaped, smooth, with six segments. Berry trilocular, spotted. Seeds single.

1. *Majalis*. *Lily of the Valley*. Stalk naked, slender, angular. Flowers white, in a long unilateral bunch, terminal, fragrant. May. In woods. *Curt.* v. 24.
2. *Poly-*

2. *Polygonatum. Sweet-smelling Solomon's Seal.* Stem single, two-edged, about a foot high. Leaves oval, alternate, their base surrounding the stem, numerous, large. Flowers white, on pedicles from the axæ of the leaves, pendulous, single. May, June. P. In the fissures of rocks. S. Brit.
3. *Multiflora. Solomon's Seal.* Stem round, near two feet high, drooping. Leaves numerous, alternate, oval, pointed, surrounding the stem with their base. Flowers, generally two or more on each pedicle, pendulous. May, June. P. In woods. Ger. 903. 1.

**HYACINTHUS.** Calyx 0. Corolla bell-shaped, with six segments, reflex. Three melliferous pores on the top of the germen. Capsule trilocular, trivalve.

1. *Non Scriptus. English Hyacinth, or Hare-bells.* Stem naked, bending at the top, about 10 inches high. Leaves long, narrow. Flowers long, blue, on pedicles, in loose spikes, terminal. May. P. In woods and under hedges frequent. Ger. 111. 1.

\* *Six petals, regular.*

**ACORUS.** Spadix simple, cylindrical, covered by the floscules, without a spathe. Petals obtuse. Style 0. Capsule trilocular.

1. *Calamus. Sweet-smelling Flag.* Leaves thick, narrow, two-edged, about two feet long. Spadix grows from a leaf thicker and rounder than the rest. May. P. In rivers, &c. Ger. 62. 1.

\*\* *Six*



\*\* *Six petals regular. Calyx a spatula.*

NARCISSUS. Corolla fixed on the outside of the tube of the nectarium, which consists of one leaf, funnel-shaped, intricate. Capsule trilocular, trivalve.

1. Poeticus. *Pale Daffodil.* Stem compressed, hollow, striated, single, about a foot high. Leaves long, narrow. Flower generally single, very pale yellow. Nectarium small, yellow. April. P. In meadows, but rare. *Ger.* 124. 7.
2. Pseudo Narcissus. *English Daffodil.* Differs from the last chiefly in the nectarium being erect, and equal in length to the petals of the corolla. March, April. In woods and hedges. *Ger.* 133. 2.

ALLIUM. Common spatula roundish, deciduous, containing several flowers. Antheræ oblong, erect. Stigma acute. Capsule short, broad, trilobed, trilocular, trivalve. Seeds many. Umbel compact.

1. Ampeloprasum. *Great round-headed Garlick.* Root lateral. Leaves narrow, flat. Umbel globose. Stamina alternately trifid. Flowers pale purple. *Ger.* 180. 2. S. Brit.
2. Arenarium. *Broad-leaved Mountain Garlick.* Stem bearing bulbs. Leaves slightly serrated. Stamina alternately trifid. Flowers pale purple. July. In the north of England. *Ger.* 187. 4.
3. Vineale. *Crow Garlick.* Leaves cylindrical, hollow. Head bulbiferous. Stamina with two long bristles exceeding the flower. *Ger.* 179. 1. June. P.
4. Oleraccum.

4. *Oleraceum*. *Wild Garlick*. Leaves rough, cylindrical. Umbel bulbiferous. Vagina with two horns. Stamina simple. Flower whitish green, with three dark purple striæ on each petal. July. In high pastures, &c. *Ger.* 188. 6. *S. Brit.*
5. *Urfinum*. *Ramson*. Stem naked, semi-cylindrical. Radical leaves lance-shaped, on foot-stalks. Umbel fastigiata. May. In woods and hedges frequent. *Ger.* 179. 2.
6. *Schœnoprasum*. *Cives*. Stalk naked, as long as the leaves, which are cylindrico-subulate. *Ger.* 177. 1. In meadows in the north. June. *P.*
7. *Carinatum*. *Kecked Garlick*. Stem with flat leaves, and bulbous. Stamina subulate. Spatha very long. *Ger.* 187. 5. June, July. *P. With.*

\*\*\* *Six petals, regular. Calyx a perianthium.*

**BERBERIS.** Calyx of six leaves, spreading, coloured, deciduous, almost as long as the corolla. Two glandules at the base of each petal. Style 0. Berry cylindrical, obtuse, unilocular. Seeds 2.

1. *Vulgaris*. *Barberry Bush*. A shrub generally 6 or 8 feet high. Bark rough. At the joints of the branches three spines. Leaves alternate, on foot-stalks, elliptical, with sharp teeth round the edges, acid. Flowers yellow, in naked bunches, terminal. Berries red. In woods and hedges frequent. May, June. *P. Ger.* 1325.

PEPLIS.

PEPLIS. Calyx bell-shaped, large, with twelve denticles alternately reflex. Petals very minute, inserted in the calyx. Style very short. Capsule bilocular. Seeds many, small, angular.

1. Portulaca. *Water Purslane*. Stems numerous, slender, creeping, 4 or 5 inches long, reddish. Leaves opposite, two at each joint, narrow at the base, with a round apex, smooth, intire, pale green. Flowers sessile, in the axæ of the leaves, purplish. Sept. P. In ponds, &c. *Curt.* iv. 27.

\*\*\*\* Six petals regular. Calyx 0.

FRITILLARIA. Corolla bell-shaped, with a broad bottom and nectariferous cavity near the base of each petal. Stamina close to the style, and the length of the corolla. Capsule oblong, obtuse, trilocular, trivalve. Seeds many, in two rows.

1. Meleagris. *Chequered Daffodil*. Root a bulb. Stem slender, about 6 or 8 inches high. Leaves narrow, alternate. Flower large, often single, on a slender pedicle, drooping, chequered with purple. May, Jun. P. In meadows, &c. Middlesex. *Ger.* 149. 1. S. Brit. *Curt.* iii. 20.

ORNITHOGALUM. Petals lance-shaped, below the middle erect, above spreading, permanent but fading. Stamina short. Style subulate. Capsule angular, trilocular, trivalve.

1. Luteum. *Yellow Star of Bethlehem*. Stalk angular, about 6 or 8 inches long, with two small leaves near the top. Radical leaves  
two,

two, as long as the stem. Flowers on pedicles, in a kind of umbel, green with-out, yellow within; tube prismatical. April, May. P. In the northern coun-ties. *Ger.* 165. 2.

2. *Pyrenaicum. Spiked Star of Bethlehem.* Radical leaves carinated, convoluted. Stem about two feet high, bearing a long terminal spike of many flowers, greenish, striated on the out-side, on equal pedicles. Fi-laments subulato-triangular. May. In meadows. *Ger.* 97. S. Brit.
3. *Umbellatum. Common Star of Bethlehem.* Radi-cal leaves numerous, carinated, convo-luted, obtuse; those on the stem white. Flowers white, with a green rib on the outside, in spikes forming a kind of um-bel, the lower pedicles being longest. Stamina alternately sagittated. In woods, meadows, &c. *Ger.* 165. 1. Apr. May. P. S. Brit.

**SCILLA.** Petals oval, spreading, deciduous. Stamina and Style half the length of the corolla. Capsule smooth, trifurcate, tri-locular, trivalve. Seeds many.

1. *Bifolia. Vernal Star Hyacinth.* Stem about six inches high. Radical leaves generally two. Root solid. Flowers blue, gene-rally four, of equal height. Apr. May. P. *Ger.* 106. 1.
2. *Autumnalis. Less Autumnal Star Hyacinth.* Stem 6 or 8 inches high. Leaves numerous, long, and very narrow. Flowers blue, terminal, in bunches on naked peduncles. Root solid. *Ger.* 110. 1. Aug. Sept. P. S. Brit.

• ANTHE-

ANTHERICUM. Petals oblong, obtuse, spreading. Antheræ small, incumbent. Germen obsolete. Style the length of the stamina. Capsule oval, smooth, trilocular, trivalve. Seeds numerous, angular.

1. Serotinum. *Mountain Saffron*. Stem about 4 or 5 inches high, with 3 or 4 small leaves, alternate. Radical leaves long, and very narrow. Flower terminal, single, white within and pale red on the out-side, below the germen. May. P. On the Welch mountains. S. Brit.
2. Calyculatum. *Scottish Asphodel*. Leaves ensiform. Stem simple, naked above. Petals long, narrow, greenish, divided by a middle line. Stigmata 3. Perianthium trifid. Spike terminal. Root white, fibrous. Sept. On mountains. *Lightf. p. 181.*
3. Officragum. *Bastard Asphodel*. Differs from the last chiefly in the filaments of the pistillum being woolly, which in that are smooth. *Ger. 95. 2.*

ASPARAGUS. Corolla below the germen; three interior petals reflex at the apex. Style very short. Berry trilocular. Seeds two, smooth.

1. Officinalis. *Sparagus*. Stem herbaceous, erect, branched, with one exterior and two interior stipulæ. Leaves like threads. Flowers small, greenish. July, Aug. In meadows near the sea, in the west of England. S. Brit.

## II. DIGYNIA.

Pistilla 2.

RUMEX. Vide *Trigynia*.

1. Digynus. *Round-leaved Mountain Sorrel*. Stem procumbent. Leaves on foot-stalks, round, notched at the extremity. Calyx and corolla each of two leaves. June. On the Welch mountains, and in the north of England.

POLYGONUM. Vide *Oelandria*, *Trigynia*.

1. Hydropiper. *Water Pepper*, or *Arsmart*. Stem erect, jointed, near two feet high. Leaves alternate, long, narrow. Flowers red, in long spikes, terminal. The whole plant acrid. July, Aug. A. Banks of rivulets, ditches, &c. *Curt.* i. 26.
2. Perficaria. *Dead*, or *spotted Arsmart*. Stem generally procumbent. Leaves lance-shaped, generally with a large black spot in the middle, and downy beneath. Stipulæ fringed. Flowers in spikes, terminal. Aug. Sept. A. In fields and waste ground frequent. *Curt.* i. 23.
3. Minus. *Creeping Arsmart*. Leaves lanceolate. Stipulæ fringed. Stem creeping at the base, 10 inches high. Leaves almost without veins, and not acrid. *Curt.* i. 28. S. Brit.

LY-

LYTHRUM. Vide *Dodecandria Monogynia*.

1. *Hyssopifolia*. *Grass-poly*, or *small Hedge Hyssop*:  
Stalks striated, 8 inches high. Leaves  
narrow, alternate. Flowers pale blue, in  
the axæ of the leaves. In ponds, &c. but  
rare. Aug. Sept. A. Ger. 581. 2. S. Brit.

III. TRIGYNIA.

Pistilla 3.

RUMEX. Calyx of 3 leaves, reflex. Co-  
rolla of 3 leaves, connivent. Stamina  
short. Stigmata large. Seed 1, triangu-  
lar. Valves of the flower graniferous. P.

1. *Sanguineus*. *Bloodwort*. Valves very entire.  
Stem 3 or four feet high. Leaves large,  
pointed, with red veins, on long red foot-  
stalks. Flowers reddish, in clusters, ter-  
minal. July. B. In the woods near  
Hampstead. Ger. 390. S. Brit.
2. *Crispus*. *Curled Dock*. Valves entire. Root  
yellow. Leaves launce-shaped, waved,  
acute. June, July. In fields, high-  
roads, &c. Curt. ii. 20.
3. *Britannica*. *Great Water-dock*. Valves entire.  
Leaves very long, launce-shaped. July,  
Aug. In fens and ditches frequent.  
Ger. 389. 1.
4. *Maritimus*. *Golden Dock*. Root red. Leaves  
very narrow, pointed. Flowers yellow,  
with indented valves. Among rubbish,  
high-roads, &c. frequent. Curt. iii. 23.



5. *Acutus*. *Sharp-pointed Dock*. Valves notched. Leaves oblong, very sharp-pointed. Jun. In moist woods, &c. *Curt.* iii. 21.
6. *Obtusifolium*. *Broad-leaved Dock*. Valves notched. Leaves broad, obtuse, notched at the end. July, Aug. In wet grounds. *Curt.* iii. 22.
7. *Pulcher*. *Fiddle Dock*. Lower leaves shaped like a fiddle, that is, hollowed out at the sides. Valve dentated. Branches procumbent. June. In dry ground.

**TRIGLOCHIN.** Calyx and corolla each of 3 leaves, obtuse, concave, similar, deciduous. Stamina very short. Styles 0. Stigmata reflex, feathered. Seeds single.

1. *Palustre*. *Arrow-headed Grass*. Culm simple, 8 or 10 inches high. Leaves long, narrow. Flowers greenish, in a long spike, terminal. Capsule trilocular, oblong. Jul. Aug. In moist ground frequent. *Ger.* 20. 1.
2. *Maritimum*. *Sea Spiked Grass*. Culm short. Leaves numerous, long, narrow, semi-cylindrical. Spike long. Flowers purplish. Capsule 6-locular, oval.

**COLCHICUM.** Calyx 0. Corolla sexpartite; tube angular; segments concave, erect. Germen within the root. Antheræ quadrivalve. Capsule trilocular. Seeds several, wrinkled.

1. *Autumnalis*. *Meadow Saffron*. Stem 0. Leaves large, lance-shaped, erect, generally perish before the flower appears. Flower purplish white, and large, of six petals rather than sexpartite. Root bulbous. *Ger.* 157. 2.

V. POLYGYNIA.

Pistilla more than 5.

ALISMA. Calyx of 3 leaves, concave, permanent. Corolla of 3 leaves, large, roundish, spreading. Capsules compressed. Seeds single, small.

1. Plantago. *Great Water Plantain*. Stem single, about 2 feet high, with many branches at the top. Radical leaves oval, sharp-pointed, intire, on long foot-stalks. Flowers reddish white. Fruit triangular. June. Banks of rivers, &c. frequent. *Curt. v. 27.*
2. Damasonium. *Star-headed Water Plantain*. Stem about 8 inches high, much branched, inclining. Leaves oblong, on foot-stalks. Flowers white, single, hexagynia, on pedicles, in clusters. Fruit hexangular: June, Sept. In stagnant water. *Curt. v. 28. S. Brit.*
3. Natans. *Creeping Water Plantain*. Stem creeping. Leaves oval, obtuse; those under water long and narrow. Flowers single, on pedicles. Aug. In lakes, &c.
4. Ranunculoides. *Less Water Plantain*. Stem erect, about a foot high. Leaves long, narrow. Flowers bluish white, on single pedicles. Fruit round and rough. June—Aug. Not common. *Ger. 417. 3.*

C L A S S VII.

H E P T A N D R I A.

Stamina 7.

M O N O G Y N I A.

Pistillum 1.

TRIENTALIS. Calyx of 7 leaves. Corolla of one petal, in 7 segments. Berry unilocular, dry. Seeds few, angular.

1. Europæa. *Chickweed Winter-green*. Stalk slender, 5 or 6 inches high, naked to the top, near which there are 6 or 7 lance-shaped leaves. Flowers stellate, white, single, on long pedicles, terminal. June. In woods, &c. in the northern counties.

## CLASS VIII.

## OCTANDRIA.

Stamina 8.

## I. MONOGYNIA.

Pistillum 1.

EPILOBIUM. Calyx quadrifid, above the germen. Corolla of 4 petals, regular. Capsule long, cylindrical, quadrilocular. Seeds numerous, downy. Receptacles very long, angular, flexile, coloured.

1. *Angustifolium*. *Rosebaw Willow-herb*. Stem reddish, erect, firm, 4 or 5 feet high. Leaves long, narrow, sessile, irregular, numerous. Flowers red, on pedicles, in long spikes; stamina and pistillum inclining. July, Aug. P. Woods and hedges. *Curt.* ii. 24.
2. *Hirsutum*. *Hairy Willow-herb*. Stem branched, 3 or 4 feet high. Leaves opposite, decurrent, lance-shaped, serrated, hairy. Flowers red, terminal; petals bifid. July. P. On the banks of rivulets, &c. frequent. *Curt.* ii. 21.
3. *Montanum*. *Smooth-leaved Willow-herb*. Stem branched, 3 or 4 feet high, very soft to the touch. Leaves opposite, oval, indented, smooth. Flowers small, red; petals bifid, numerous, terminal. June, July. B. In moist meadows. *Curt.* iii. 24.

I 4

4. Tetra-

4. *Tetragonum*. *Narrow-leaved Willow-herb*. Stem square. Leaves opposite, narrow, indented, smooth. Spike inclining. Flowers red, petals bifid. July. P. On the banks of rivulets, ditches, &c. *Curt.* ii. 23.
5. *Palustre*. *Marsh Willow-herb*. Stem erect, round. Leaves long, narrow, opposite, entire, smooth. Flowers numerous, large, red; petals bifid. July. Fens, &c.
6. *Alpinum*. *Mountain Willow-herb*. Stem scarce a foot long, creeping. Leaves somewhat oval, pointed, opposite, entire. Flowers few, small, light purple, bifid. Pods sessile. July. Northumberland, in rivulets.
7. *Villosum*. *Woolly Willow-herb*. *CURT.* Leaves lanceolate, serrated, downy, decurrent, sessile. Stem generally simple, cylindrical, woolly. *Curt.* ii. 22. July, Aug. P.

**VACCINIUM.** Calyx minute, quadridentate, above the germen, permanent. Corolla generally quadrifid. Filaments inserted in the recepticulum. Style longer than the stamina. Berry quadrilocular, with many angular seeds.

1. *Myrtillus*. *Black Wortle Berries*, or *Bilberries*. A small shrub. Stem angular, branched. Leaves oval, serrated, deciduous. Flowers reddish white, on single pedicles, pendulous. Fruit bluish black, small. Apr. In woods, heaths, &c. *Ger.* 1415. 1.
2. *Uliginosum*. *Great Bilberry Bush*. A shrub about 2 feet high. Leaves oval, entire, fringed at the base, deciduous. Flowers single, purplish white. Fruit bluish black, larger than the last. April, May. In the north. *Ger.* 1416. 6.

3. *Vitis*

3. *Vitis idæa*. *Red Wortle Berries*. An ever-green shrub. Stem inclining. Leaves oval, narrowest near the foot-stalk, intire, spotted on the under-side. Flowers reddish white, in pendulous clusters. Berries red. April, May. In the mountainous parts of the northern counties. *Ger.* 1415. 2.
4. *Oxycoccus*. *Crane Berries*. An ever-green shrub. Stem very slender, creeping, naked. Leaves intire, oval, curled. Flowers reddish white, on pedicles. Fruit red. May, June. On moors in the northern counties. *Ger.* 1419.

ERICA. Calyx of 4 leaves, coloured, permanent. Corolla campanulate, quadrifid. Filaments inserted in the receptacle. Capsule quadrilocular, quadrivalve. Seeds numerous, minute. Slender shrubs,

\* *Antheræ with two horns.*

1. *Vulgaris*. *Common Heath*, or *Ling*. Stem slender, brown, woody, 1 or 2 feet high. Leaves imbricated, covering the stem in a quadruple series. Flowers purplish, in spikes, terminal; corolla like the calyx, unequal. June—Sept. On heaths frequent. *Curt.* v. 30.
2. *Cinerea*. *Fine-leaved Heath*. Stem simple, woody; bark ash colour. Leaves narrow, smooth, in triple series. Flowers crimson, pendulous, in terminal spikes. *Curt.* ii. 25.
3. *Tetralix*. *Cross-leaved Heath*. Leaves quadruple, hairy, spreading. Corolla nearly globose, aggregate, longer than the calyx. July, Aug. On moist heaths. *Curt.* i. 21.

\*\* *Antheræ*

\*\* *Antheræ simple, obtuse, notched.*

4. Ciliaris. *Rough-leaved Heath.* Leaves triple, hairy, sessile, spreading, acute, reflex. Corollæ irregular, oval, large, in terminal, triple whirls. June. On heaths. S. Brit.
5. Multiflora. *Fir-leaved Heath.* Leaves narrow, quintuple. Flowers numerous; corollæ campanulate, long. June, July. Heaths in Cornwall. S. Brit.
6. Daboecii. *Irish Worts.* Stem woody, branched, hairy, brown. Leaves oval, alternate, sub-sessile, curled at the edges, white and downy on the under-side. Flowers large, in long terminal bunches. Ireland. *Hudf.* Habit of an Andromeda.
7. Didyma. *Double-tipped Heath.* Antheræ double, projecting; filaments capillary. Corolla campanulate. Style projecting. Leaves in fives. Flowers on stalks much longer than the flower. *With.* S. Brit.

DAPHNE. Calyx o. Corolla of one petal, funnel-shaped, tube cylindrical, imperforate; limb quadrifid; segments acute, spreading. Stamina very short, inserted in the tube. Style very short. Berry unilocular, with a single seed.

1. Mezereum. *Spurge Olive.* A strong shrub, 4 or 5 feet high. Flowers sessile, round the stem, pale red, appear before the leaves, which are lance-shaped, smooth, crowning the tops of the branches. Mar. In woods near Andover. S. Brit. *Ger.* 1402. 2.

2. Laureola.



2. *Laureola. Spurge Laurel.* An ever-green shrub, 4 or 5 feet high. Leaves on the tops of the branches, numerous, lance-shaped, smooth. Flowers from the axæ of the leaves, yellowish green, small, on pedicels. Mar. Apr. In woods. *Ger.* 1404. 1.

## II. DIGYNIA.

Pistilla 2.

GENTIANA. Calyx octifid. Corolla of 1 petal, octifid, length of the calyx, without tube. Styles 2. Capsule oblong, pointed, unilocular, bivalve. Seeds numerous, small. *Chloracæ, Sm. F. Br.*

1. *Perfoliata. Yellow Centaury.* Stem about 2 feet high, at the top branched and sub-divided. Leaves perfoliate, united at the base, lance-shaped, entire. Flowers yellow, in loose clusters, terminal. July. A. In high pastures.

## III. TRIGYNIA.

Pistilla 3.

POLYGONUM. Calyx 6. Corolla 5-partite, resembling a calyx. Stamina and pistilla very short. Seed 1, angular.

1. *Bistorta. Great Bistort, or Snakeweed.* Stem simple, round, slender, jointed, near 2 feet high. Lower leaves on foot-stalks, oval, whitish on the under-side; upper leaves narrower, surrounding the stem at their

their base. Flowers pale red, in 1 short thick spike. May, June. In wet meadows. *Curt.* i. 22.

2. *Viviparum*. *Small Bistort*, or *Snakeweed*. Stem simple, slender, jointed, 6 or 8 inches high. Radical leaves broad, the rest long, narrow. Flowers whitish, on a single thin spike. June. In high pastures in the north. *Ger.* 399. 2.
3. *Pensylvanicum*. *Pale Asmart*. Stamina sometimes less than 8. Stem with many branches, angular. Leaves lance-shaped, pointed, with a rough longitudinal ridge on the under-side. Flowers on rough glutinous pedicles, in loose spikes. Aug. A. In fields and waste ground frequent. *Curt.* i. 24. S. Brit.
4. *Maritimum*. *Sea Knot-grass*. A shrubby evergreen. Leaves oval, thick, whitish beneath. Flowers white, quatern, in the axæ of the leaves. July. P. On the coast. S. Brit.
5. *Aviculare*. *Knot-grass*. Stem herbaceous, procumbent, branched. Leaves lance-shaped, but various. Flowers reddish white, in the axæ of the leaves. June—Sept. A. In fields, &c. frequent. *Curt.* i. 27.
6. *Convolvulus*. *Black Bindweed*. Stem weak, voluble, striated. Leaves heart-shaped, single, distant. Flowers whitish, in loose clusters, from the axæ of the leaves. Seed triangular. June—Sept. A. In corn-fields, &c. frequent. *Curt.* iv. 29.
7. *Fagopyrum*:

7. *Fagopyrum*. *Buck-wheat*, or *Brank*. Stem single, erect, branched, about 2 feet high. Leaves heart-shaped, pointed, on pedicles. Flowers purplish white, on pedicles, in loose spikes. July, Aug. A. In corn-fields, &c. frequent, though not a native. *Ger.* 89.

## IV. TETRAGYNIA.

Pistilla 4.

PARIS. Calyx of 4 leaves. Petals 4. Berry quadrilocular. Seeds numerous.

1. *Quadrifolia*. *Herb Paris*, *True-love*, or *One-berry*. Stem single, simple, about 10 inches high. Leaves oblong, 4 or 5, near the top. Flower greenish white, single, terminal. Berry bluish black. May, June. In woods. *Ger.* 405. 1.

ADOXA. Calyx bifid. Corolla quadrifid, or quinquifid, above the germen. Berry quadrilocular, between the calyx and corolla.

1. *Moschattellina*. *Tuberous Moschatel*, or *Musk Wood Crowfoot*. Stalk smooth, slender, about 4 inches high, with a pair of lobed leaves in the middle, on short foot-stalks. Flowers terminal, 5, yellowish green. Berries green. Apr. May. In woods. *Curt.* ii. 26.

ELATINE. Calyx of 4 leaves. Petals 4. Capsule quadrilocular, quadrivalve, depressed. Seeds many.

1. *Alfinastrum*. *Waterwort*. Leaves long and very narrow, in whirls. August. In ditches. S. Brit.

CLASS

C L A S S IX.

ENNEANDRIA.

Stamina 9.

HEXAGYNIA.

Pistilla 6.

BUTOMUS. Calyx 0. Petals 6. Capsules 6. Seeds many.

1. Umbellatus. *Flowering Rush, or Water Gladiole.* Stem round, thick, naked, about 2 feet high. Radical leaves numerous, long, narrow. Flowers reddish white, in a kind of umbel, terminal. June. Rivers, ditches, &c. *Curt. i. 29.*

CLASS

## C L A S S X.

## D E C A N D R I A.

Stamina 10.

## I. MONOGYNIA.

Pistillum 1.

MONOTROPA. Calyx 0. Petals 10, serrated at the top, deciduous; the exterior 5 gibbous, meliferous. Capsule oval, pentangular, quinquevalve. Seeds numerous, chaffy. *N. B.* This description respects the terminal flower only; the lateral flowers have but 8 stamina, &c.

1. Hypopithis. *Bird's Nest*. Stalks twisted, naked, except a few loose membranes, 8 or 10 inches high. Flowers yellow. The whole plant smells like primrose roots. Jul. P. In woods, but rare. *H. ox.* xii. 16.

ANDROMEDA. Calyx with 5 segments. Corolla oval, of 1 petal, quinquifid, reflex. Capsule quinquelocular, quinquevalve. Seeds numerous, polished.

1. Polifolia. *Marsh Cistus*, or *Wild Rosemary*. Stem short, branched. Leaves narrow, curved at the edges, and alternate. Flowers reddish, on pedicles, in clusters. Apr. May. On turf-bogs in the north. *Park.* 76. 7.

ARBU-

ARBUTUS. Calyx minute, quinquepartite, permanent. Corolla of 1 petal, oval, quinquefid, reflex. Berry quinquelocular. Seed small, hard.

1. Unedo. *Common Strawberry-tree*. A shrub. Stem erect. Leaves smooth, serrated. Flowers white. Berries red, with many seeds. In the west of Ireland. *Ger.* 1496.
2. Alpina. *Mountain Strawberry-tree*. Stem procumbent, about a foot long. Leaves rough, serrated. Fruit large, bluish black. In the north. *Lightf.* 216.
3. Uva Urſi. *Bear-berries*. Stems woody, numerous, diffuse, procumbent. Leaves oval, intire. Flowers white, on pedicles, in clusters, with a purple calyx. *Wallis Northumb.* p. 148.

PYROLA. Calyx minute, in 5 segments, permanent. Petals 5, roundish, concave, spreading. Capsule quinquelocular, opening at the angles.

1. Rotundifolia. *Common Winter-green*. Stem single, simple, about 6 inches high. Radical leaves smooth, roundish, on very long foot-stalks. Flowers white, bell shaped, on slender pedicles, in a short thin spike; stamina ascending; pistillum declined. June, July. In woods, chiefly in the north. *Ger.* 408. 1.
2. Minor. *Less Winter-green*. Stem about 4 inches high. Leaves generally serrated. Spike compact; flowers reddish white; stamina and pistillum erect. Aug. With the last.
3. Secunda. *Tender Winter-green*. Stalk slender, about 6 inches high, with a spike on one side

fide only. Leaves pointed, serrated. Jun.  
In woods in the north. Ger. 408. 2.

## II. DIGYNIA.

Pistilla 2.

**CHRYSOSPLENIUM.** Calyx above the  
germen, in 4 or 5 segments, coloured,  
spreading. Corolla 0. Stamina, in the  
lateral flowers, generally but 8, very  
short. Capsule with a double beak, uni-  
locular, bivalve, with several small seeds.

1. *Alternifolium.* *Alternate-leaved golden Saxifrage.*  
Stalk 5 or 6 inches long. Leaves round-  
ish, hairy, notched round the edges, on  
long foot-stalks, pale green. Flowers on  
short pedicles, in small clusters, terminal,  
bright gold colour. April. In woods  
in the north.

2. *Oppositifolium.* *Common golden Saxifrage.*  
Leaves roundish, on short foot-stalks,  
opposite. Flowers gold colour, in the  
axæ of the leaves, very small. Stalks  
weak, 4 inches high. April. In woods  
near Hampstead, &c. Curt. ii. 27.

**SAXIFRAGA.** Calyx small, in 5 acute  
segments. Corolla of 5 petals, spreading.  
Capsule with two beaks, unilocular,  
opening between the points. Seeds nu-  
merous, small.

\* *Leaves undivided. Stalks naked.*

1. *Stellaris.* *Hairy Kidney-wort.* Stalks simple.  
Leaves oblong, indented at the end,  
hairy. Flowers white, petals pointed,



with a semilunar yellow spot near the base, in a loose terminal spike. Jun. Jul. P. On high mountains near water.

2. *Nivalis*. *Mountain Sengreen*. Radical leaves oval, notched, on short foot-stalks, spread in tufts upon the ground. Stalk simple, about a foot high, bearing a roundish spike of white flowers; petals acute, spotted. June. P. On the Welch mountains, and in Scotland. *Lightf. p.* 127.
3. *Umbrosa*. *London Pride*. Leaves inversely oval, notched. Stem naked, paniculate. *Mill.* 141. 2. S. Brit.

\*\* *Leaves undivided. Stem bearing leaves.*

4. *Oppositifolia*. *Mountain Heath-like Sengreen*. Stem creeping; branches numerous, short, procumbent. Leaves oval, opposite, quadruple, imbricated, fringed. Flowers blue, single; calyx hairy, purple. April, May. P. Among rocks, on high mountains. *Flor. dan.* 34.
5. *Hirculus*. *Marsh Saxifrage*. Stem-leaves lanceolate, alternate, naked, unarmed. Stem erect, purple, hairy. July, Aug. P. S. Brit. *Ger.* 1284. 8.
6. *Autumnalis*. *Autumnal Sengreen*. Stalks several, simple, about a foot high. Radical leaves in tufts, prickly at the edges; those on the stalk narrow, alternate, fringed. Flowers yellow, spotted, on long pedicels, from the axæ of the upper leaves. July, Aug. P. On turf-bogs in Cheshire, &c. *Ger.* 516. 2.
7. *Aizoides*. *Yellow Mountain Sengreen*. Differs from the last in the stem being procumbent,

bent, the leaves not fringed, and growing less regularly alternate on the stem. Aug. On the sides of mountains in the north. Supposed a variety only.

\*\*\* *Leaves lobed. Stem erect.*

8. *Granulata. White Sengreen, or Saxifrage.* Root granulated. Stem a foot high, branched, with few leaves, alternate. Radical leaves reniform, lobed, on long pedicles. Flowers large, white, in short loose spikes; calyx hairy. May. In dry meadows, &c. *Curt. i. 30.*

9. *Tridactylites. Rue-leaved Sengreen, or Willow-grass.* Stem small, branched, hairy, clammy, often red. Leaves alternate, wedge shaped, trifid, hairy; the lower ones on long foot-stalks. Flowers white, single, on pedicles from the axæ of the leaves. April. A. In waste ground, on walls, &c. *Curt. ii. 28.*

10. *Cæspitosa. Small Mountain Sengreen.* Radical leaves numerous, narrow, some intire, others bifid or trifid, in a thick tuft on the ground. Stem almost naked, about 3 inches high, bearing 2 or 3 greenish white flowers. Aug. P. On the mountains in Westmoreland, &c. S. Brit.

\*\*\*\* *Leaves lobed. Stem procumbent.*

11. *Hipnoides. Trifid Sengreen.* Stem about 6 inches high, much branched, clammy, reddish. Leaves narrow, trifid, clammy, on pedicles. Flowers greenish white. April, May. On mountains in the northern counties. *H. ox. xii. 9. 26.*

**SCLERANTHUS.** Calyx tubular, quinquefid. Corolla o. Stamina minute. Capsule oval, minute, in the neck of the calyx. Seeds 2.

1. *Annuus. German Knot-grass, or Knawel.* Stem branched, procumbent. Leaves long, narrow, opposite. Calyx of the fruit spreading. Flowers greenish, in the axæ of the leaves, small. Aug. A. In corn-fields, &c. *Ger.* 566. 4.
2. *Perennis. Perennial Knawel.* Stem shorter, and flowers larger than the last. Calyx of the fruit shut. Flowers in terminal bunches. Leaves hoary. Aug. In sandy corn-fields. *Ger.* 567. 5. *S. Brit.*
3. *Polycarpus.* Calyces spinous, wide-spreading. Stem sub-villous. Said to have been found in Eskdale, Scotland. *Lightf. App.* 1134.

**SAPONARIA.** Calyx of 1 leaf, tubular, with 5 teeth, permanent, generally bursting on 1 side. Corolla of 5 petals, unguiculate. Capsule the length of the calyx, covered, unilocular, cylindrical. Seeds several, small.

1. *Officinalis. Soapwort.* Stem branched, about 2 feet high. Leaves elliptical, long, pointed, with 3 longitudinal ribs, firm, smooth, opposite. Flowers white or reddish, in umbels terminating the branches. July, Aug. In hedges, &c. *Curt.* ii. 29. *S. Brit.*

**DIANTHUS.** Calyx of 1 leaf, cylindrical, tubular, striated, with 5 teeth, and 4 scales

scales round the base. Corolla of 5 petals, with claws as long as the calyx. Styles longer than the stamina. Capsule cylindrical, covered, unilocular.

1. *Armeria. Deptford Pink.* Stem jointed, above a foot high. Leaves in pairs, pointed, broad. Flowers red, in the axæ of the leaves, aggregate, in clusters; scales of the calyx hairy, lance-shaped; petals pointed, jagged. July. A. In meadows, &c. *Ger.* 594. 11. S. Brit.
2. *Prolifer. Limewort.* Stem branched, not quite a foot high. Leaves opposite, long, narrow. Flowers small, red, aggregate, in roundish heads; scales of the calyx oval, obtuse, longer than the tube. Aug. A. Rare. *Ger.* 599. 5. S. Brit.
3. *Deltoides. Maiden Pink.* Stem branched, part procumbent, part erect, 6 or 7 inches high. Leaves opposite, oblong. Flowers bright red, single, terminal; petals notched. June—Sept. P. In meadows, heaths, &c. *Ger.* 593. 6.
4. *Glaucus. Mountain Pink.* Stem branched. Scales of the calyx lance-shaped, short. Flower white. Corolla notched. July. P. On mountains. *With.*
5. *Arenarius. Stone Pink.* Stem with a single flower. Scales of the calyx obtuse. Flower red, hairy; petals multifid. Leaves narrow. July. P. In dry pastures, &c. but rare. *Ger.* 594. 12.
6. *Caryophyllus. Pink.* Flowers solitary. Scales of the calyx sub-oval, very short. Corolla notched. On old walls. *Ger.* 474. 2. July. P.

7. *Barbatus*. *Sweet William*? Flowers aggregated. Scales of the calyx ovato-subulate, as long as the tube. Leaves lanceolate. On a stone wall, at King's Weston, near Bristol.

## III. TRIGYNIA.

## Pisilla 3.

CUCUBALUS. Calyx inflated, with 5 teeth, permanent. Corolla of 5 regular, bifid, unguiculated petals, not crowned by a nectarium. Capsule covered, pointed, trilocular. Seeds many. Leaves opposite.

1. *Bacciferus*. *Berry-bearing Chickweed*. Stem weak, procumbent, branched, forked. Leaves at the joints, in pairs, oval, pointed. Calyx campanulate. Flowers small, white; petals distant from each other. Pericarpium like a berry, coloured. July. In hedges in the Isle of Man. *Ger.* 614. 13. Transferred by Dr. Withering to the next genus.
2. *Behen*. *Bladder Campion*, or *White Corn-campion*. Stem about 2 feet high, jointed, branched, procumbent. Leaves smooth, oval, pointed at the joints, opposite, pale. Flowers white, on foot stalks, single. Calyx globose, white, smooth, reticulate. Jul. P. In corn-fields, &c. *Ger.* 678. 2.
3. *Otites*. Vide *Dioecia Decandria*.

SILENE. Calyx bellying, with 5 teeth, permanent. Corolla of 5 regular, bifid, unguicu-

unguiculated petals, crowned by a nectarium. Capsule cylindrical, covered, trilocular. Seeds many. Leaves opposite.

1. *Anglica. Small Corn Champion, or Catchfly.* Stem weak, hairy, above a foot high. Leaves oblong, in pairs at the joints. Flowers small, white, intire, on pedicles from the axæ of the leaves, erect, alternate, single, lateral. June, July. A. In corn-fields. *Curt. iv. 30. S. Brit.*
2. *Nutans. Nottingham Catchfly.* Stem about 2 feet high, firm. Radical Leaves broad, obtuse, in a tuft; those on the stem narrow, acute. Flowers white, in lateral panicles; petals bifid, curled; calyx long, bellying a little, with ten longitudinal striæ. June, July. P. In high pastures, &c. *Ger. 470. 8. S. Brit.*
3. *Amoena. Sea Champion.* Stem 2 or 3 feet long, slender, procumbent, branched alternately. Leaves long, narrow. Flowers white, on opposite pedicles, 3 on each, in unilateral bunches. Calyx 10-angular, hairy, purplish. June, July. P. On the south coast. *Ger. 469. 2.*
4. *Conoidea. Greater Corn Catchfly, or Champion.* Leaves narrow, soft. Calyx conical, with 30 striæ. Flowers from the divarications of the stem; petals intire. In corn-fields. *Ger. 470. 7. Jun. A. S. Brit.*
5. *Noctiflora. Night-flowering Catchfly.* Stem about 2 feet high, forked. Calyx 10-angular, somewhat clammy, oval, with longer teeth than the other species; petals reddish white. July. A. In corn-fields.

6. *Armeria. Broad-leaved Catchfly.* Stem about 18 inches high, erect, with few branches. Leaves smooth, sessile, broad at the base. Flowers terminal, in fastigate bundles, small, red. Jul. Aug. A. On the banks of rivers.
7. *Acaulis. Moss Campion.* Radical leaves spread on the ground like a tuft of moss. Stalks about an inch long, naked, bearing each a single purple flower. July. On mountains in Wales, &c. *Lightf. pl. 12. p. 227.*

STELLARIA. Calyx of 5 leaves, spreading, permanent. Corolla of 5 petals, each in 2 segments. Capsule oval, covered, unilocular, sexvalve. Seeds several.

1. *Nemorum. Broad-leaved Stitchwort.* Stem not quite erect, simple. Leaves opposite, broad at the base, waved round the edges, pointed on foot-stalks. Flowers terminal, in loose panicles, white. Jul. Aug. In woods, banks of rivers, &c. in the north. *H. ox. v. 23. 2.*
2. *Holosteia. Greater Stichwort.* Stalks numerous, slender, jointed, near 2 feet long. Leaves opposite, harsh, lance-shaped, slightly serrated. Flowers white, numerous. April, May. P. In woods and hedges frequent. *Curt. ii. 30.*
3. *Graminea. Less Stichwort.* Stem more firm than the last, and not quite a foot high. Leaves narrower, opposite, intire. Flowers in loose panicles, white. Jul. A. In moist ground frequent.

ARE-



**ARENARIA.** Calyx of five leaves, spreading, permanent. Corolla of five petals, intire, oval. Capsule unilocular, covered, oval, opening at the top in five parts. Seeds many. Leaves opposite.

1. *Peploides.* *Sea Chickweed.* Stalks short, numerous, spreading on the ground, thick set with leaves, opposite, oval, pointed, thick. Flowers small, white. Capsule large. June, July. P. On the coast frequent. *Ger.* 622. 1.
2. *Trinervia.* *Plantain-leaved Chickweed.* Stems about six inches high, numerous, weak. Leaves oval, pointed, with three longitudinal ribs, on foot-stalks. Flowers white, on pedicles. May. A. In moist woods and hedges frequent. *Curt.* iv. 31.
3. *Serpyllifolia.* *Least Chickweed.* Stalks numerous, branched, about three inches high. Leaves sessile, oval, pointed. Flowers white, numerous, terminal; petals intire. May, June. A. On walls and sandy ground frequent. *Curt.* iv. 32.
4. *Verna.* *Mountain Chickweed.* Stalks numerous, much branched, about 3 inches long. Leaves narrow, linear, close. Flowers on pedicles, single, in terminal panicles, or umbels. Aug. In the mountainous parts of the kingdom.
5. *Tenuifolia.* *Fine-leaved Chickweed.* Stalks branched, procumbent or erect, thick set with leaves. Leaves narrow, pointed. Flowers single, on pedicles in terminal panicles. Petals shorter than the calyx.

calyx. Capsules erect. June, July. P.  
On walls, &c. but rare.

6. *Laricifolia*. *Larch-leaved Chickweed*. Root woody. Stalks several, almost naked at the top, six inches high. Leaves in bundles, like bristles, but soft. Flowers single, terminal, large. Calyx hairy. July, Aug. P. On the mountains in the north.
7. *Rubra*. *Purple-flowered Chickweed*, or *Spurry*. Stalks numerous, weak, jointed, three or four inches high. Leaves narrow, with membranous vaginal stipulæ. Flowers purple, on pedicles, single. June, July. A. In corn-fields, and on the coast.

CHERLERIA. Calyx of five leaves. Corolla o. Nectaria five, notched, minute. Antheræ, alternately sterile. Capsule trilocular, trivalve.

1. *Sedoides*. *Mossy C.* Stalks two inches, matted together, and crowded with leaves, opposite, linear, acute, firm, with rough edges, and collected in a sheath at the bottom. Flowers single, erect, pedunculate, yellow-green, terminal. N. Brit. Highlands. *Lightf. Park.* 737. 11.

## V. PENTAGYNIA.

Pistilla 5.

COTYLEDON. Calyx small, quinquefid, acute. Corolla of one petal, bell-shaped, quinquefid. Germina five, with a necta-

a nectariferous scale at the base of each. Capsules five, oblong, univalve. Seeds several.

1. Umbilicus. *Navelwort*, *Kidneywort*, or *Wall Pennywort*. Stem about six inches long, branched. Radical leaves round, an inch in diameter, notched round the edges, on long foot-stalks fixed in the center of the leaf. Flowers yellowish, in long spikes. May, July. P. On old walls, &c. but rare. *Ger.* 528.
2. Lutea. *Yellow Navel-wort*. CURT. Leaves target-shaped, falloped. Stem nearly simple. Flowers erect. Floral leaves dentated. *Huds.* June. P.

SEDUM. Calyx quinquifid, acute. Corolla of five petals, pointed, spreading. Germina five, oblong, with a nectariferous scale at the base of each. Capsules five. Seeds many, small.

1. Telephium. *Orpine*, or *Live-long*. Stem near two feet high, erect, thick set with oblong serrated leaves, which, with the stem, are bluish green, succulent, and often reddish. Flowers large, purple, in terminal leafy bunches. Aug. P. In pastures, &c. *Curt.* iii. 25.
2. Dasphyllum. *Round-leaved Stonecrop*. Stem weak. Leaves oval, thick, obtuse, opposite. Flowers white, scattered. July. P. On walls, &c. *Curt.* iii. 26. S. Br.
3. Reflexum. *Yellow Stonecrop*, or *Prick-madam*. Stalks some procumbent, others erect, often red. Upper branches curved. Leaves numerous, scattered, thick, ending

ing in a sharp point, with a loose membrane at the base. Flowers yellow, in bunches, terminal. On walls, &c. frequent. *Ger.* 512. 1—513. 6.

4. Rupestre. *St. Vincent's Rock Stonecrop*. Stem procumbent. Leaves thick, narrow, pointed, with loose membranes at the base, numerous, five together. Flowers yellow, in bunches, terminal. Aug. On rocks, &c.
5. Album. *White-flowered Stonecrop*. Leaves thick, numerous, obtuse. Flowers white, in branched bunches, terminal. June, July. On walls, &c. frequent. *Curt.* i. 31. S. Brit.
6. Acre. *Wall Stonecrop*, or *Pepper*. Stalks weak, three or four inches high, thick set with thick, oval, pointed leaves, alternate. Flowers yellow, in trifid bunches, terminal. June. On walls, &c. frequent. *Curt.* i. 32.
7. Sexangulere. *Insipid Stonecrop*. Leaves oval, sessile, gibbous, imbricated, six together. Branches not numerous. Flowers yellow, generally three on each branch of the cluster. July. B. In dry meadows. *Curt.* iv. 33.
8. Annum. *Mountain Stonecrop*. Stem single, erect, but weak. Leaves oval, sessile, gibbous, whitish, alternate. Flowers white, or mixed with red, on curved branches. Not acrid. Aug. A. Is not this the *sedum Anglicum* of Hudson, and *Rubens* of Lightfoot?
9. Villosum. *Marsh Stonecrop*. Stem erect, about six inches high, below smooth, above

above hairy. Leaves not very thick, obtuse. Flowers pale red, with a purple line, on hairy pedicles, in clusters, terminal. June. A. On mountains in the north. *Ger.* 516. 1.

**OXALIS.** Calyx of five leaves, or parts. Corolla of five petals, adhering to each other by their claws. Exterior stamina shortest. Capsule pentangular, quinquelocular.

1. *Acetosella.* *Wood Sorrel.* Root long, scaly, jointed. Leaves heart-shaped, three on each foot-stalk. Flowers reddish white, single, on slender stalks or rather pedicles. April. In woods, &c. *Curt.* ii. 31.
2. *Corniculata.* *Yellow-flowered Wood Sorrel.* Stem branched, diffuse, procumbent, creeping, reddish. Leaves ternate, heart-shaped, pale-green, about the size of the nail of the little finger, on slender foot-stalks near an inch long. Flowers yellow, on umbelliferous pedicles. Capsules long, pointed. May, Oct. A. S. Brit. I am obliged to Mr. John Turner of Lympston, near Exeter, for a specimen of this plant, who found it in several places in the neighbourhood of that city, and who, I believe, first discovered it in these kingdoms.

**AGROSTEMA.** Calyx of one leaf, as long as the corolla, coriaceous, tubular, with five teeth. Petals five, with claws as long as the tube of the calyx, spreading, obtuse, intire. Capsule oval, covered, unilocular, quinquevalve. Seeds several, punctured.

1. *Githaco.*

1. *Githaco. Cockle.* Stem erect, branched, hairy, two feet high. Leaves opposite, long, narrow, hairy, sessile. Flowers terminal, large, purple. June. A. In corn-fields. *Curt.* iii. 27.

LICHNIS. Calyx tubular, smooth, membranous, with five teeth. Corolla of five petals. Styles longer than the stamina. Capsule covered, oval, quinquevalve. Seeds several.

1. *Flos Cuculi. Meadow Pink, or Cuckow-flower.* Stem about two feet high, branched, striated, hollow. Leaves opposite, long, narrow, sessile. Flowers red, large, terminal; petals quadrifid. June. P. In moist meadows, &c. *Curt.* i. 33.
2. *Viscaria. Red German Catchfly.* Stem erect, simple, clammy towards the top. Leaves opposite, sessile, oblong, pointed. Flowers small, red, in clusters, terminal; petals intire. May, June. P. In high grounds. *Ger.* 601. 3.

CERASTIUM. Calyx of five leaves, spreading. Petals five, the length of the calyx, obtuse, bifid. Capsule unilocular, with five teeth at the apex. Seeds many. Leaves opposite, sessile.

\* *Capsules oblong.*

1. *Vulgatum. Narrow-leaved Mouse-ear Chickweed.* Stalks jointed, branched, diffuse, about a foot high. Leaves hairy, oval, pointed. Flowers small, white in the alæ of the upper leaves. June. A. In meadows, &c. frequent. *Curt.* ii. 34.
2. *Viscosum.*

2. Viscosum. *Viscous Mouse-ear Chickweed.*  
Stalks erect, hairy, clammy. Leaves hairy, obtuse. Flowers like the last. April, May. A. In dry meadows; &c. Curt. ii. 35.
3. Semidecandrium. *Least Mouse-ear Chickweed.*  
Stalks diffuse, branched, two inches high. Leaves hairy. Flowers white, small; five of the stamina have no antheræ. April. A. In meadows frequent. Curt. ii. 33.
4. Arvense. *Corn Mouse-ear Chickweed.* Stalks weak, in part procumbent, six or eight inches high, hairy. Leaves narrow, smooth. Flowers large, white, in the axæ of the branches, and at the top; corolla longer than the calyx. May. P. In fields, &c. on gravel. Ger. 595. 15.
5. Alpinum. *Alpine Mouse-ear Chickweed.*  
Stalks numerous, procumbent, divided. Leaves oval, pointed. Flowers large, white; petals longer than the calyx. June. P. Fl. dan. 6.

\* Capsules roundish.

6. Latifolium. *Broad-leaved Mouse-ear Chickweed.*  
CURT. Leaves oval, woolly. Branches three inches, generally with one flower, erect, large. May. P. Lightf. x. p. 199.
7. Aquaticum. *Marsh Mouse-ear Chickweed.*  
Stalks procumbent, a foot long. Leaves heart-shaped. Flowers white, single; fruit pendulous. July. On the banks of rivers. Curt. i. 34.
8. Tomentosum. *Woolly Mouse-ear Chickweed.*  
Leaves oblong, woolly. Flowers large,



on branched pedicles. Capsule globose. May. On the Welch mountains frequent. S. Brit.

SPERGULA. Calyx of five leaves, concave, spreading. Petals five, oval, concave, spreading, larger than the calyx, intire. Capsule oval, covered, unilocular, quinquevalve. Seeds several.

1. Arvensis. *Corn Spurry*. Stalks erect, jointed, branched towards the top. Leaves narrow, in whirls round the joints. Flowers small, white, terminal. Aug. A. In fields, on gravel. *Curt. v. 31.*
2. Nodosa. *Knotted Spurry*, or *English Marsh Saxifrage*. Stalk simple, procumbent, five inches long. Leaves smooth, narrow, pointed, two larger at each joint, opposite. Flowers white, terminal. Jul. P. *Curt. iv. 34.*
3. Pentandria. Vide *Pentandria Pentagynia*.

C L A S S XI.

D O D E C A N D R I A.

Stamina 12 to 20.

I. MONOGYNIA.

Pistillum 1.

ASARUM. Calyx quadrifid, coloured above the germen. Corolla o. Stamina and pistilla half the length of the calyx. Stigma stellate. Capsule coriaceous, crowned. Seeds several.

1. Europæum. *Asarabacca*. Leaves reniform, an inch in diameter, single, on long foot-stalks, two together. Flowers single, purplish, on short pedicles, from the root. May. P. In woods in Lancashire, &c. *Ger.* 836. 1.

LYTHRUM. Calyx cylindrical, with twelve teeth. Petals six, inserted in the calyx. Capsule bilocular. Seeds many.

1. Salicaria. *Purple-spiked Loosefriste*, or *Willow-herb*. Stem square, firm, branched, two feet high. Leaves long, pointed, two or three at each joint. Flowers in whirls, on long spikes. July. P. On the banks of rivers. *Curt.* iii. 28.

Vide *Hexandria Digynia*.

VOL. II.

L

II. DIGY-

## II. DIGYNIA.

Pistilla 2.

AGRIMONIA. Calyx with five teeth, surrounded by an exterior calyx. Petals five. Seeds two, in the bottom of the calyx.

1. Eupatoria. *Agrimony*. Stem erect, firm, hairy, about two feet high. Leaves pinnated, serrated, alternate. Flowers yellow, large, on a long, slender, terminal spike. Fruit rough. June. P. In fields and hedges. *Curt. v. 32.*

## III. TRIGYNIA.

Pistilla 3.

RESEDA. Calyx of one leaf, divided. Petals irregular, jagged, some of them trifold. Capsule unilocular, open between the styles.

1. Lutea. *Base Rocket*. Stalks numerous, slender, between one and two feet high. Leaves trifid; the lower pinnated. Flowers small, yellow, on spikes, terminal. Petals four or six. July. A. In fields, &c. on a chalky soil. *Ger. 277. i.*
2. Luteola. *Wild Woad, or Dyers Weed*. Stalks several, simple, about three feet high. Leaves lance-shaped, entire, with a denticle on each side of the base. Flowers small, yellow, on long spikes. Calyx quadrifid.

quadrifid. Petals three or five; the upper one in six segments, the side ones in three. Stamina near twenty. June. A. On waste ground frequent. Ger. 494.

EUPHORBIA. Calyx of one leaf, bellying, with four teeth. Corolla of four petals, alternate with the teeth of the calyx, thick, gibbous, truncated, their claws fixed in the margin of the calyx. Stamina jointed. Styles bifid. Capsule roundish, trilocular. Seeds single.

1. Peplis. *Small Purple Sea Spurge*. Stem branched, procumbent, purplish. Leaves purplish, obtuse, oval, intire. Flowers small, yellow, in the axæ of the leaves. June. A. On the Cornish coast. Ger. 503. 20. S. Brit.

\* *Umbels trifid; partial umbels forked.*

2. Peplus. *Petty Spurge*. Stem much branched, eight or ten inches high. Leaves oval, intire, on pedicles. Flowers yellowish green. July. A. A common weed in gardens. Curt. i. 35.

3. Exigua. *Dwarf Spurge*. Stalks branched, procumbent, three or four inches long. Leaves narrow, erect; those immediately under the umbels are broader and longer. Flowers yellow, small. July. A. In corn-fields. Curt. iv. 36.

\*\* *Umbels quinquifid; partial umbels forked.*

4. Segetalis. *Corn Spurge*. Stems numerous, erect. Leaves long, narrow, alternate; those under the partial umbels broad, pointed. Flowers small, yellow, on the

top of the stem, and on small branches. Petals horned. July, Aug. A. In corn-fields.

5. *Helioscopia*. *Sun Spurge*. Stem single, about a foot high, branched at the top. Leaves narrow at the base, broad and round at the end. Flowers greenish yellow, terminal. July. A. In kitchen-gardens frequent. *Curt. i.* 36.
6. *Portlandica*. *Portland Spurge*. Stem somewhat woody, smooth, reddish, six or eight inches high. Leaves alternate, almost sessile, narrow, pointed, spreading. Involucella broad, pointed, concave. Flowers yellow; first and second male, petals obtuse; the rest hermaphrodite, petals horned. Aug. A. On coast. S. Brit.
7. *Paralias*. *Sea Spurge*. Stem about half a yard high, intirely covered with oblong pointed leaves, imbricated. Flowers yellowish green, in bifid, subquincifid umbels. Involucella oval. July, Aug. On the coast frequent. *Ger.* 498. I. S. Brit.
8. *Verrucosa*. *Rough-fruited Spurge*. Leaves elliptical, somewhat hairy, and slightly serrated. Involucella heart-shaped. Capsules intirely covered with warts. Aug. P. In corn-fields. *H. ox. X.* 3. 3. S. Brit.
9. *Platyphyllos*. *Broad-leaved Spurge*. Stem erect, smooth, a foot high. Leaves alternate, remote, lance-shaped, slightly serrated, sessile, the lower ones on short footstalks, and broader at the end. Petals yellowish green. Capsules covered with smaller

smaller warts than the last. Partial umbels bifid. Trifid umbels from the alæ of the leaves. July. A. In corn-fields, but rare. S. Brit.

\*\*\* *Umbels multifid.*

10. *Hyberna. Knotty-rooted Spurge.* Root tuberous. Stalks simple. Leaves numerous, short, intire. Umbels sexfid. Flowers yellowish. Capsules warty. July, Aug. P. In corn-fields. S. Brit. Ger. 500. 12.

11. *Amygdaloides. Wood Spurge.* Radical leaves long, obtuse, downy on the under-side, in a spreading tuft; the other leaves elliptical. Stalks three feet high, with slender branches, and flowers on long pedicles, from the alæ of the leaves. Involucella round, perfoliate. Petals lunated. April. In corn-fields, &c. Ger. 500. 9. S. Brit.

12. *Characias. Red Spurge.* A shrub, four feet high, reddish. Leaves launce-shaped, reddish, downy on the under side. Umbels small, with numerous radii. General involucre of many leaves. Involucella perfoliate, bifid. June. In woods, but rare. Ger 499. 8. S. Brit.

#### IV. DODECAGYNIA.

Pistilla 12.

SEMPERVIVUM. Calyx in twelve segments. Corolla of twelve petals. Capsules twelve. Seeds several.

L 3

1. Tec-

150 DODECANDRIA, DODECAGYNIA:

1. Tectorum. *House-leek*. Stalk about a foot high. Radical leaves thick, oval, pointed, fringed, spreading in a rose; those on the stem imbricated, membranous. Flowers pale red, sessile, on curved, terminal bunches. July. P. On the tops of houses frequent. Ger. 510. 1.

C L A S S



CLASS XII.

ICOSANDRIA.

Calyx of one leaf, concave. Corolla fixed by its claws to the inside of the Calyx. Stamina twenty or more.

I, MONOGYNIA.

Pistillum 1.

PRUNUS. Calyx quinquifid. Petals five, regular, roundish, concave, spreading, large. Fruit a *drupa*, containing a stone with prominent futures.

1. Padus. *Wild Cluster Cherry*, or *Bird's Cherry*. A tall shrub. Leaves oblong, serrated, deciduous, with two glands on the under side of the base. Flowers white, in large pendulous clusters. Fruit black. In woods and hedges in the mountainous parts of the north of England. May, June. P. Ger. 1504. 9.
2. Cerasus. *Black Cherry*. A small tree. Leaves smooth, lance-shaped, conduplicate. Umbels sub-fessile. Stipulæ indented: Bractææ trifid. In woods and hedges.
3. Avium. *Common wild Cherry*. A tree. Leaves lance-shaped, downy beneath. Umbels fessile. Fruit red. April. In woods and hedges.
4. Infinitia. *Black and White Bullace*. A spinous shrub. Leaves oval, pointed, downy beneath.

beneath. Flowers from the alæ of the leaves, on pedicles, two together. Fruit black or white. April. In hedges frequent.

5. *Spinosa*. *Black Thorn*, or *Sloe*. A spinous shrub. Leaves lance-shaped, smooth. Flowers from the alæ of the leaves, on single pedicles. March, April. In hedges. *Ger.* 1497. 5.

## II. DIGYNIA.

*Pistilla* 2.

**CRATÆGUS.** Calyx quinquifid. Corolla of five petals, regular. Stamina about twenty. Berry below the flower, fleshy, with two seeds.

1. *Aria*. *White Beam Tree*. A tree ten or fifteen feet high. Leaves oval, irregularly serrated, downy beneath. Flowers in umbels. Fruit red, sweet. May. In woods, &c. mountainous. *Ger.* 1327. 2.
2. *Tormalis*. *Wild Service Tree*. About ten or twelve feet high. Leaves septangular, downy beneath, serrated. Flowers in umbel. Fruit brown, with white spots, downy. April. In woods and hedges. *Ger.* 1471. 2. *S. Brit.*
3. *Oxyacantha*. *Hawthorn*, or *White Thorn*. A tall crooked shrub. Leaves smooth, numerous, irregularly divided and serrated. Flowers white, in a kind of umbel. May. In woods and hedges frequent. *Ger.* 1326. 1. Is this the *C. Monogynia* of Linnæus?

III. TRI-

### III. TRIGYNIA.

Pistilla 3.

SORBUS. Calyx quinquifid. Corolla of 5 petals. Stamina 20, inserted in the calyx. Berry below the flower, soft, containing 3 seeds.

1. Oucuparia. *Quicken-tree*, or *Mountain Ash*. A tree not very tall. Bark brown, smooth. Leaves smooth, pinnated; pinnæ about 8 pair, with an odd one at the end, slightly serrated. Flowers white, in close umbels. Fruit red. May. In woods and hedges. *Ger.* 1473.
2. Domestica. *True Service Tree*. A large tree. Leaves pinnated, downy on the under-side. Flowers in umbels. Fruit yellowish brown, like a small pear. Apr. May. In the mountainous parts of Cornwall and Staffordshire. *S. Brit.*

### IV. PENTAGYNIA.

Pistilla 5.

MESPILUS. Calyx quinquifid. Petals 5, Berry below the flowers; seeds 5.

1. Germanica. *Medlar*. A tree not very tall, Leaves lance-shaped, somewhat oval, downy underneath, serrated at the apex, on very short foot-stalks. Flowers white, terminal, single, sessile. Fruit brown. May. In hedges about Minchiville.

PYRUS.

PYRUS. Calyx quinquifid. Petals 5.  
Pomum below the flower, quinquelocular. Seeds several.

1. Communis. *Wild Pear Tree*. A tall spinous tree; branches erect. Leaves oblong, smooth, serrated. Fruit lengthened at the base. Apr. In woods and hedges. S. Brit.
2. Malus. *Crab Tree*. Branches diffuse. Leaves serrated, oval. Flowers on sessile umbels. Fruit round, hollow at the base. May. In woods and hedges.

SPIRÆA. Calyx quinquifid. Petals 5.  
Capsules bivalve. Seeds few, small.

1. Filipendula. *Drop-wort*. Stem about two feet high, hollow, striated, naked. Leaves pinnated, serrated. Flowers reddish white, in bunches. July. In meadows, &c. Ger. 1058. 1.
2. Ulmaria. *Meadow-Sweet*. Stem about four feet high, branched, striated. Leaves pinnated; terminal pinna large, lobed. Flowers white, in bunches, terminal. June, July. In wet meadows, and banks of rivers. Ger. 1043. 1.

## V. POLYGYNIA.

Pistilla many.

ROSA. Calyx urn-fashioned, fleshy, quinquifid; segments long, narrow. Petals five, inserted in the neck of the calyx. Stamina and pistilla very short. Seeds numerous, downy, adhering to the inside of the calyx. Shrubs.

1. Rubigi-

1. *Rubiginosa*. *Sweet Briar*, or *Eglantine*. Firm, erect, spinous. Leaves roundish, generally five together, rusty on the under-side, and clammy at the ends. Flowers small, pale. The whole plant smells like apples. May, June. *Ger.* 1269. 1.
2. *Villosa*. *Apple-Rose*. Spinous. Leaves downy on both sides, oval. Fruit spherical, large, spinous. Flowers deep red. June.
3. *Spinosissima*. *Burnet Rose*. Stem firm but low, much branched and very prickly. Leaves pinnated. Foot-stalks spinous. Flowers white. Fruit round and smooth. June. On heaths, &c. *Ger.* 1270. 4.
4. *Canina*. *Dog-Rose*, or *Common Briar*. Stem eight or ten feet high, with hooked spines. Leaves five or seven together, oval, smooth. Flowers pale red, odoriferous. Fruit large, smooth, oval, red. May, June. In hedges. *Curt.* v. 34.
5. *Alba*. *White Dog-Rose*. Differs from the last in being a less shrub, with rounder fruit, and white flowers.

**RUBUS.** Calyx quinquefid. Petals five, inserted in the calyx. Fruit a berry, composed of many small ones, with a single seed in each.

1. *Idæus*. *Raspberry Bush*. Stem slender, erect, about six feet high. Leaves somewhat oval, pointed, white and downy on the under-side, pinnated, five or three. Flowers white. Fruit red. May, June. In woods, &c. *Ger.* 1272. 2.

2. *Cæsius*.

2. Cæsius. *Small Bramble, or Dewberry-Bush.* Stem slender, short, prickly, procumbent. Leaves ternate. Flowers white, double. Fruit bluish. June, July. In woods and hedges.
3. Fruticosus. *Common Bramble.* Stem long, creeping, spinous. Leaves 3 or 5, on a pedicle, serrated. Flowers white. Fruit black. May—October. In woods and hedges. Ger. 1272. 1.
4. Saxatilis. *Stone Bramble.* Stem herbaceous, slender, short, creeping. Leaves ternate, not downy, notched round the edges, and shaped like those of the elm. Flowers on short pedicles. Fruit fine red, composed of few but larger berries. June. On the sides of mountains in the northern counties. Ger. 1273. 4.
5. See *Class XXII.* ord. IX.

FRAGARIA. Calyx with 10 segments. Petals 5. Receptacle of the seed a succulent berry, deciduous. Seeds numerous, pointed. Leaves ternate.

1. Vesca. *Strawberry.* Stem short, hairy, erect. Leaves broad, serrated, whitish beneath. Tendrils creeping. Flowers 6 or 8, large, white. May, June. P. In woods, &c.
2. Sterilis. *Barren Strawberry.* Stem weak, creeping. Flowers single, white. Leaves oval, serrated, downy, white underneath. Apr. In barren pastures frequent. Ger. 998. 3.

POTENTILLA. Calyx with 10 segments. Petals 5. Receptacle of the seed small, dry, permanent. Seeds numerous, roundish.

\* *Leaves*

\* *Leaves pinnated.*

1. Fruticosa. *Shrub Cinquefoil*. Stem erect, woody, branched. Leaves 5 or 7 on each foot-stalk, downy beneath. Flowers large, yellow. Jun. Yorksh. *H. ox.* 23. S. Br.
2. Anserina. *Silver-weed, or Wild Tansey*. Stem creeping. Leaves serrated, silver-white beneath. Flowers yellow, on pedicles. June, July. *P. Curt.* iii. 31.
3. Rupestris. *Bastard Cinquefoil*. Stem erect, 2 feet high, branched. Leaves alternate; pinnæ oval, indented, 5 or 7, hairy. Flowers numerous, large, white. July. Wales. *Ger.* 921. S. Brit.

\* *Leaves 5-fingered.*

4. Argentea. *Silver-leaved Cinquefoil*. Stalks numerous, erect, hairy, six or eight inches high. Leaves serrated, silver-white beneath. Flowers yellow. June. In pastures, &c. *Ger.* 988.
5. Verna. *Spring Cinquefoil*. Stem declining. Radical leaves 5-fingered, serrated, those above ternate. Flowers yellow. May, Jun. In barren pastures, &c. *Ger.* 988. 8.
6. Opaca. *Small rough Cinquefoil*. Stalks weak, branched, procumbent, hairy. Radical leaves 5-fingered, serrated, hairy. Flowers large, yellow. June. In Yorkshire, but rare. *Ger.* 989. 9.
7. Reptans. *Common Cinquefoil*. Stem slender, creeping. Leaves oblong, serrated. Flowers yellow, single. June. *Curt.* i. 37.
8. Alba. *White Cinquefoil*. Stem procumbent. Leaves serrated, and hollowed at the apex.



apex. Flowers single, white. Receptacle hairy. Aug. In Wales.

**TORMENTILLA.** Calyx octifid. Petals 4. Stamina not more than 16. Seeds 6 or 8, oblong, naked, fixed to a small dry receptacle.

1. *Erecta.* *Tormentil*, or *Septfoil*. Stem erect, branched, from 3 or 4 inches to a foot high. Leaves sessile, generally in seven lobes, deeply divided, and serrated. Flowers small, yellow; petals heart-shaped. June. In pastures frequent. *Curt. v.* 35.
2. *Reptans.* *Creeping Tormentil*. Stalks reddish, slender, creeping. Leaves sharply serrated, on short foot-stalks, and 5-lobbed. Flowers numerous, yellow. July. In woods and barren pastures.

**GEUM.** Calyx with ten segments. Petals five, rounded. Receptacle of the seed oblong, hairy. Seeds numerous, with each a long jointed style.

1. *Urbanum.* *Common Avena*, or *Herb-bennet*. Stem erect, branched, two or three feet high. Leaves pinnated; the side pinnæ gradually increasing in size as they approach that at the extremity, which is much larger, rounded, and acutely serrated. Flowers yellow, terminal, erect. Fruit roundish, hairy, the size of a nut. June, July. In woods and hedges. *Curt. ii.* 36.
2. *Rivalve.* *Water Avena*. Stem about a foot high, branched at the top. Leaves lyrate like the last, but the extreme pinnæ

næ trilobed. Flowers numerous, purple, drooping; petals rolled up cylindrically. Fruit oblong. Style of the seed downy. July. On the northern and Welch mountains. *Ger.* 995. 4.

DRYAS. Calyx with five or eight segments, linear, obtuse. Petals five or eight, notched, spreading. Seeds numerous, with each a long downy style.

1. Octopetala. *Mountain Avens*. Stem somewhat woody, about six inches long. Leaves simple, oval, harsh, ferrated, hoary beneath. Flowers single, large, white, on hairy pedicles. July. On the mountains in Ireland, Scotland and Yorkshire. *Ger.* 659. 6.

COMARUM. Calyx in ten segments, coloured, large. Petals five, much shorter than the calyx, pointed. Stamina about twenty. Receptacle spongy, permanent. Seeds numerous, pointed, covering the receptacle.

1. Palustre. *Purple Marsh Cinquefoil*. Stem partly procumbent; the part which is erect, is about one foot and a half high. Leaves pinnated. Flowers single, terminal, large, purple; petals small. June. On bogs, &c.

## C L A S S XIII.

## P O L Y A N D R I A.

Stamina numerous ; but wanting the other characteristics of the preceding Class. Stamina on the receptaculum.

## I. M O N O G Y N I A.

Pistillum 1.

NYMPHÆA. Calyx of 4 or 5 leaves, large. Petals many. Style 0. Berry hard, multilocular, truncated, filled with pulp.

1. Lutea. *Yellow Water Lily*. Root very thick and long. Leaves large, heart-shaped, single, on long foot-stalks, floating on the surface of the water. Flowers yellow, single, on long pedicles, floating ; calyx of 5 leaves. Aug. P. In slow rivers, pools, &c. *Ger.* 819. 2.
2. Alba. *White Water Lily*. Flowers white ; calyx of 4 leaves : otherwise much like the last. July. In rivers, ponds, &c. *Ger.* 819. 1.

\* *Petals* 4.

ACTÆA. Calyx of 4 leaves, deciduous. Petals pointed at each end, deciduous. Style 0. Berry unilocular, smooth. Seeds semilunar, in a double row.

1. Spicata. *Herb Christopher*, or *Bane-berries*. Stem about 2 feet high, slender, jointed, striated.

ated. Leaves large, glossy, ternate, and subdivided, like those of the umbelliferous plants. Flowers small, white, in oval clusters. Berries small, black. May, June. P. In woods. *Ger.* 979. S. Brit.

CHELIDONIUM. Calyx of 2 leaves, obtuse, deciduous. Petals large, roundish, spreading. Stamina about 30. Style 0; stigma bifid. Fruit a cylindrical pod. Seeds many.

1. Majus. *Celandine*. Stem weak, about 2 feet high. Leaves pinnated, subdivided, lobed, indented. Flowers small, on separate pedicles, in umbels. The whole plant contains a yellow juice. May, June. On waste ground. *Ger.* 1069. 1.
2. Glaucium. *Yellow-horned Poppy*. Stem about 2 feet high. Leaves downy, sessile, embracing the stem, blue-green; those from the root pinnated, the rest lobed. Flowers yellow, large, single, terminal. Jul. A. On the coast. *Ger.* 367. 1.
3. Hybridum. *Violet-horned Poppy*. Stem about a foot high, smooth, erect. Leaves pinnated; segments very narrow. Flowers single, large, terminal, purple. Pods trivalve. Aug. A. In corn-fields. *Ger.* 367. 4.
4. Corniculatum. *Orange-horned Poppy*. Peduncles unifloral. Leaves sessile, pinnatifid. Stem rough, forked, branched, furrowed. July, Aug. A. *Ger.* 367. 2.

PAPAYER. Calyx of 2 leaves, obtuse, deciduous. Petals large, roundish, spreading, alternately less. Style 0; stigma

radiated. Capsule unilocular. Seeds numerous, small.

1. *Hybridum*. *Round rough-headed Poppy*. Stalks above a foot high, hairy, branched, with many leaves, which are triply pinnatifid. Flowers, not large, red. June, Jul. A. In corn-fields, but rare. *Ger.* 373. 1. S. Brit.
2. *Argemone*. *Long rough-headed Poppy*. Differs from the last chiefly in the shape of the pericarpium, or seed-vessel, which is long, angular, and thickest towards the top. Jun. A. In corn-fields. *Curt.* v. 38.
3. *Rhoeas*. *Round smooth-headed, or Corn Poppy*. Stem hairy, branched. Leaves pinnatifid, jagged. Flowers red. Capsule round, smooth, small. June. A. In corn-fields. *Curt.* iii. 32.
4. *Dubium*. *Long smooth-headed Poppy*. Differs from the last, chiefly in the shape of the capsule. June, July. A. *Curt.* v. 37.
5. *Somniferum*. *White Poppy*. Stem erect, smooth, branched, 3 or 4 feet high. Leaves bluish, smooth, simple, broad, irregularly indented, sessile, embracing the stem. Flowers white, with a purplish tinge. Capsule large, round, smooth. Seeds white. Jul. A. In waste ground. *Ger.* 369. 1. 2. S. Brit.
6. *Cambricum*. *Yellow Poppy*. Stem smooth, branched. Leaves pinnated, jagged. Flowers yellow. Capsule oblong, smooth. Stigmata 5 to 6. June—Aug. P. In Wales, Westmoreland, &c. *Park.* 369. 4. S. Brit.

\*\* *Petals*

\*\* *Petals five.*

TILIA. Calyx of 5 segments, coloured, deciduous. Petals obtuse, notched. Stamina 30 or more. Berry round, dry, quinquelocular, quinquevalve, opening at the base. Seeds single.

1. Europæa. *Lime-tree*. A large tall tree. Leaves heart-shaped, serrated. Flowers white, odoriferous. July. In woods and hedges. *Ger.* 1483. 1.

CISTUS. Calyx of 5 leaves, 2 of which are less than the rest. Petals roundish, large, spreading. Capsule.

1. Anglicus. *Hoary Dwarf Cistus*. Stems woody, numerous, 3 or 4 inches long, procumbent. Leaves opposite, oblong, pointed, hoary beneath. Flowers large, yellow, in clusters. July. In the north of England. S. Brit.
2. Guttatus. *Annual Cistus*. Stem herbaceous, about a foot high, branched at the top. Leaves opposite, lance-shaped, with 3 nerves. Flowers pale yellow, with a red spot on each petal. Stipulæ 0. June. In sandy meadows. *Ger.* 1281. S. Brit.

\* *With Stipulæ.*

3. Surrejanus. *Narrow-leaved Cistus*. Stems numerous, woody, procumbent. Leaves opposite, oblong, somewhat hairy. Flowers yellow, with narrow petals. July. On heaths, particularly in Surry. S. Brit.
4. Helianthemum. *Dwarf Cistus*, or *little Sunflower*. Stems numerous, woody, procumbent, about a foot long. Leaves opposite, oblong, curled, slightly hairy.

Stipulæ quatern. Flowers yellow, single, 3 or 4 in a loose cluster; petals intire. Jul. Particularly on chalk hills. *Curt. v. 36.*

5. Polifolius. *Mountain Dwarf Cistus*. Stems numerous, woody, procumbent. Leaves very numerous, thick, oblong, sessile, downy. Flowers white. July. P. On Brent-downs, Somersetsh. S. Brit.
6. Salicifolius. *Willow-leaved Cistus*. Herbaceous, spreading, woolly. Flowers in bunches, erect. Pedicles horizontal. Capsules longer than the calyx. June, Jul. A. *Ger. 1280. 17.* S. Brit.

## II. TRIGYNIA.

Pistilla 3.

DELPHINIUM. Calyx 0. Petals 5, unequal. Nectarium bifid, involved in the tube of the horned petal.

1. Consolida. *Wild Larkspur*. Stem about 6 inches long, subdivided. Leaves in narrow segments. Flowers in loose spikes, blue. Capsule 1. June. A. In corn-fields. *Ger. 1083. 5.* S. Brit.

## III. PENTAGYNIA.

Pistilla 5.

AQUILEGIA. Calyx 0. Petals 5, equal. Nectaria 5, between the petals, with each a posterior horn or tail, obtuse. Stamina 30 or more. Capsules 5, univalve. Seeds several.

1. Vulgaris.



1. *Vulgaris. Columbine.* Stem erect, branched at the top. Leaves bluish, subdivided, lobed, on foot-stalks. Flowers large, blue, pendulous. Nectaria curved. Jun. P. In woods, &c. *Ger.* 1093. 1.
2. *Alpina. Mountain Columbine.* Leaves biternate, jagged. Flowers blue, large; petal of the nectarium long, lance-shaped; horn short, straight. Jun. P. In mountainous woods in Westmoreland, &c. S. Brit.

#### IV. HEXAGYNIA.

Pistilla 6.

STRATIOTES. Spatha of 2 leaves. Perianthium trifiid. Petals 3. Berry sexlocular, below the flower.

1. *Aloides. Water Aloe, or Fresh-water Soldier.* Root consists of long fibres tufted at the ends. Leaves thick, triangular, pointed, prickly at the edges. Flowers white, floating on the water. June. Slow rivers, fens, &c. *Ger.* 825.

#### V. POLYGYNIA.

Pistilla many.

ANEMONE. Calyx 0. Petals in a double or triple order, 3 in each. Seeds numerous.

1. *Pulsatilla. Pasque Flower.* Stalk hollow, hairy, 8 or 10 inches high, with a jagged involucrum at some distance below the flower. Leaves bipinnated. Flowers large, purple, single. Apr. P. In high ground. *Ger.* 385. 1. S. Brit.

2. *Nemorosa. Wood Anemone.* Stem about 7 inches high, with 3 leaves, in many segments, at some distance from the flower. Radical leaves on long footstalks, and divided like those above. Flower single, white, frequently with a red tinge. Apr. In woods, &c. *Curt.* ii. 38.
3. *Apennina. Mountain Wood Anemone.* Differs from the last chiefly in the petals being purple, numerous, and lance-shaped. April. P. In woods, &c.

CLEMATIS. Calyx 0. Petals 4. Receptacle round, small. Seeds several, with each a style.

1. *Vitalba. Great Wild Climber, or Traveller's Joy.* Stem woody, climbing, and twisting round every thing in its way. Leaves opposite, pinnated; pinnæ oval, serrated. Flowers white, small, in tufts, fragrant. July. In hedges. *Curt.* iv. 37. S. Brit.

THALICTRUM. Calyx 0. Petals 4. Seeds several, without style.

1. *Alpinum. Mountain Meadow Rue.* Stem weak, simple, naked, about a foot high. Leaves tridentate, acute, glossy, dark green above. Flowers drooping, terminal, deep red, in loose clusters. June. P. In moist ground on mountains. Stamina 12. Pistilla 8. *Lightf.* xiii. p. 286.
2. *Minus. Less Meadow Rue.* Stem leafy, bluish, simple, about a foot high, erect. Leaves sexpartite, large, the ends tinged with purple. Flowers yellowish white, in loose pendulous

pendulous clusters. July, Aug. P. On moist mountains, &c. *Ger.* 1251. 2.

3. *Flavum. Meadow Rue.* Stem leafy, erect, furrowed, purplish, about 3 feet high. Root yellow. Leaves large, dark, bluish green above, subdivided, notched. Flowers small, whitish, in short spikes, or clusters. June. P. In moist ground, banks of rivers, &c. *Ger.* 1251. 1.

**ADONIS.** Calyx of 5 leaves, hollow, obtuse, deciduous. Petals, 5 to 15, oblong, obtuse, glossy. Nectarium 0. Stamina very short. Styles 0. Seeds numerous, naked.

1. *Autumnalis. Adonis, Pheasant's Eye, red Maithes, or red Morocco.* Stem firm, erect, branched, about  $1\frac{1}{2}$  foot high. Leaves in narrow segments, on foot-stalks. Flowers scarlet; petals 8. July, Aug. A. In corn-fields. *Curt.* ii, 37. *S. Brit.*

**RANUNCULUS.** Calyx of 5 leaves (except sp. 4). Petals 5 (except sp. 4); nectarium a cavity or pore in each petal, above the claw. Styles 0. Seeds several. The nectarium is the essential characteristic of this genus, the other parts of fructification being uncertain,

\* *Leaves simple.*

1. *Flammula. Less Spearwort.* Stem leaning. Leaves lance-shaped, broad, on foot-stalks. Flowers deep yellow. June—Sept. P. Fens, &c. frequent. *Ger.* 961. 2.
2. *Lingua. Spearwort.* Stem 3 feet high, erect, hollow, branched. Leaves sessile, thick, smooth, pointed, a foot long, and about

an inch broad. Flowers large, terminal, deep yellow. May, June. P. In wet pastures, &c. *Ger.* 961. 1.

3. *Ficaria*. *Pilewort*, or *Less Celandine*. Calyx generally of three leaves. Petals lance-shaped, commonly eight. Nectarium shut by a scale. Stamina from eighteen to 36. Stem short, procumbent. Leaves heart-shaped, angulated, on foot-stalks. Flowers yellow. March, April. P. In meadows, &c. frequent. *Ger.* 816.
4. *Reptans*. *Narrow-leaved creeping Spearwort*. Leaves linear. Stem creeping. *Lightf. frontispiece, Vol. I.* Considered by many as a variety of the *R. flammula*.  
\* *Leaves divided.*
5. *Auricomus*. *Sweet Wood Crowfoot*, or *Goldilocks*. Radical leaves reniform, notched, divided; those on the stem deeply divided into narrow segments. Flowers numerous, yellow. April. P. In woods and hedges frequent. *Curt.* ii. 41.
6. *Sceleratus*. *Round leaved Water Crowfoot*. Stem about one foot and a half high. branched. Lower leaves divided into broad segments, the upper into narrow. Leaves smooth. Flowers small, yellow. May, June. A. In water frequent. *Curt.* ii. 42.
7. *Bulbosus*. *Bulbose Crowfoot*, or *Butter Cups*. Stem erect. Leaves composite. Pedicels of the flowers grooved. Calyx curved downwards. Root a round bulb. May. P. In meadows frequent. *Curt.* i. 38.

8. *Hirsutus*.

8. *Hirsutus*. *Hairy R.* CURT. Root fibrous. Stem and leaves hairy; hairs on the latter from projecting points. Flowers pale yellow. Leaves yellowish green. June—Sept. A. Curt. ii. 40. S. Brit.
9. *Repens*. *Creeping Crowfoot*. Stems creeping. Leaves dead green, and often spotted, composite, ternate, somewhat hairy. Flowers numerous, Calyx spreading, and pedicles grooved. May. P. In meadows, &c. frequent. Curt. iv. 3.
10. *Acris*. *Upright Meadow Crowfoot*. Stem erect. Leaves pentangular, tripartite, multifid, acrid. Flowers numerous, on equal branches. Calyx spreading; pedicles cylindrical. June, July. In meadows, &c. frequent. Curt. i. 38.
11. *Arvensis*. *Corn Crowfoot*. Stem erect, about  $1\frac{1}{2}$  foot high. Upper leaves decomposite; segments narrow. Flowers small, pale, yellow. Stamina about 16. Seeds prickly, about 8. June. A. In corn-fields. Ger. 951. 3.
12. *Parviflorous*. *Small-flowered Crowfoot*. Stem weak, prostrate, diffuse, hairy. Leaves simple, deeply divided, acute, hairy. Flowers very small. May. A. In meadows, corn-fields, &c. Ray 12. 1. S. Brit.
13. *Hederaceus*. *Ivy-leaved Water Crowfoot*. Stem diffuse, weak, jointed, creeping. Leaves roundish, trilobed, intire, with, generally, a black spot in the center, floating. Flowers white, or pale yellow. May, July. P. In slow rivers, ditches, &c. Curt. iv. 39.

14. Aqua-

14. *Aquatilis*. *Various-leaved Water Crowfoot*.  
 Stem branched, jointed, thick, weak.  
 Leaves are under water, divided into  
 very narrow segments; those on the sur-  
 face roundish, trilobed, notched, on foot-  
 stalks. Flowers large, single, white, on  
 pedicles from the same vagina with the  
 leaf. April, May. P. In ditches, &c.  
*Ger.* 829. 1.

**TROLLIUS.** Calyx 0. Petals about 14.  
 Nectaria 9, linear, perforated at the  
 base. Styles 0. Pods numerous, in a  
 round head. Seeds single.

1. *Europæas*. *Globe-flower, or Locker-gowlans*.  
 Stem simple, taper, about 2 feet high.  
 Leaves lobed, divided; segments acute.  
 Flowers single, terminal, large, globose,  
 yellow. Seeds black, glossy. June. P.  
*Ger.* 955. 12.

**HELLEBORUS.** Calyx 0. Petals 5, oval,  
 equal, spreading. Nectaria several, in a  
 circle, tubular, with 2 lips. Capsule  
 compressed, double-ridged. Seeds several.

1. *Viridis*. *Small Wild black Hellebore*. Stem se-  
 veral, leafy, erect, about a foot high.  
 Leaves fingered. Flowers terminal, nu-  
 merous, large, green. Mar. Apr. P. In  
 woods, &c. but rare. *Ger.* 976. 2.
2. *Foetidus*. *Great Bastard black Hellebore, Bear's-  
 foot, or Setterwort*. Stem about 3 feet  
 high, leafy. Leaves trilobed; lateral  
 lobes quadrifid, dry, glossy, serrated,  
 narrow, pointed. Flowers numerous, on  
 pedicles, in a kind of umbel. March,  
 Apr. P. In fields and hedges frequent.  
*Ger.* 976. 4. *S. Brit.*

CAL-

CALTHA. Calyx 0. Petals 5, oval, spreading, large, deciduous. Styles 0. Nectaria 0. Capsules several, short, pointed, double-ridged. Seeds several.

1. Palustris. *Marsh Marigold*. Stalk erect, about 2 feet high. Leaves single, heart-shaped, notched round the edges; those from the root on long, thick foot-stalks. Flowers large, yellow. April. Banks of rivers, &c. *Curt*, i. 40.

CLASS



## C L A S S   XIV.

## D I D Y N A M I A.

Stamina four, two long, and two short.  
Pistillum one. Corolla monopetalous,  
irregular, generally ringent.

## I. G Y M N O S P E R M I A.

Seeds four, naked. Stem square. Leaves opposite:

VERBENA. Calyx of one leaf, angular,  
linear, 5-dentate, one of them truncated.  
Corolla monopetalous, tubular, irregular,  
with five slight segments in the rim.

1. *Officinalis*. *Vervain*. Spikes filiform, pan-  
iculate. Leaves with many clefts. Stem  
single. Waste ground. Aug. A. *Curt.*  
i. 41.

\* *Calyx quinquefid.*

AJUGA. Corolla ringent; upper lip  
small, erect, bifid; under lip large,  
trifid, middle segment large. Stamina  
longer than the upper lip. Stigmata  
two.

1. *Pyramidalis*. *Mountain Bugle*, or *Sicklewort*.  
Stalks slender, erect, square, hairy, sim-  
ple, a foot, or more, high. Leaves op-  
posite, narrow at the base, deeply in-  
dented.

dented. Flowers blue, or red, or white, in spikes. June. B. In Wales, &c.

2. Reptans. *Bugle*. Stem single, simple, square, about eight inches high. Shoots creeping. Leaves opposite, oval, somewhat hairy, notched. Flowers blue, red, or white, in long leafy spikes. May, July. P. In meadows, and on hills. *Curt.* ii. 43.

TEUCRIUM. Corolla ringent; upper lip erect, acute, deeply divided, segments distant from each other; under lip trifid. Stamina prominent, between the segments of the upper lip. Stigmata two.

1. Chamæpitys. *Ground Pine*. Stem diffuse, covered with leaves, about five or six inches high. Leaves narrow, trifid, intire. Flowers sessile, small, yellow, in the axæ of the leaves. Jun. Jul. A. Corn-fields, &c. *Ger.* 525. 1. S. Brit.
2. Scorodonia. *Wood Sage*. Stem erect, square, about two feet high. Leaves opposite, heart-shaped, serrated, on foot-stalks. Flowers greenish white, in unilateral spikes. July. P. Woods, heaths, &c. *Curt.* v. 40.
3. Scordium. *Water Germander*. Stem diffuse, weak, square, hairy. Leaves opposite, sessile, oblong, serrated. Flowers red, two together, in the axæ of the leaves. Jul. Aug. P. On wet ground. *Ger.* 534. 1. S. Brit.
4. Chamædris. *Germander*. Stem procumbent, square. Leaves opposite, indented, notched, on foot-stalks. Flowers red, three

three together, in the alæ of the leaves.  
 Jun. Jul. P. In the ruins of Winchelsea castle, &c. Ger. 656. 1. S. Brit.

NEPETA. Middle segment of the under lip of the corolla notched. Palate heart-shaped. Stamina approximate. Stigma bifid.

1. *Cataria*. *Cat Mint*, or *Nap*. Stalks firm, erect, square, branched, hoary; near three feet high. Leaves broad, heart-shaped, hoary, opposite, serrated, on foot-stalks. Flowers purplish white, in longish clusters, terminal. July. P. In hedges. Ger. 682. 1.

MENTHA. Corolla quadrifid, nearly equal; broader segment notched. Stamina erect, distant. Stem square. Leaves opposite.

1. *Sylvestris*. *Long-leaved Horse Mint*. Stem firm, erect, branched. Leaves sessile, hoary, serrated. Flowers reddish white, in close spikes, terminal. Jul. Aug. P. On wet ground. Ger. 684. 3. S. Brit.
2. *Viridis*. *Spear Mint*. Stem erect, about two feet high. Leaves smooth, sessile, lance-shaped, serrated, fresh green. Flowers small, red, in long interrupted spikes. Jul. Aug. P. On the banks of rivers, in Essex, Kent, &c. Ger. 680. 3. S. Br.
3. *Rotundifolia*. *Round-leaved Horse Mint*. Stem erect, about two feet high. Leaves sessile, roundish, wrinkled, notched. Flowers red, in oblong spikes, terminal. On wet ground, but rare. Aug. P. S. Brit.

4. *Aquatica*.

4. *Aquatica. Water Mint.* Stem erect, about two feet high. Leaves oval, pointed, serrated, on foot-stalks. Flowers pale red, in round spikes, terminal. July. P. Banks of rivers, &c. *Ger.* 684. 1.
5. *Piperita. Pepper Mint.* Stem erect, two or three feet high, but little branched. Leaves ovato-oblong, serrated, on short foot-stalks. Flowers red, in short, thick spikes, terminal. Aug. P. Banks of rivulets, &c. S. Brit.
6. *Sativa. Curled Mint.* Stems numerous, chiefly procumbent, about a foot long. Leaves oval, serrated, often curled at the edges. Flowers purple, in whirls, at the joints. Stamina longer than the corolla. July, Aug. P. Banks of rivers, &c. *Ger.* 680. 1.
7. *Gentilis. Red Mint.* Stem erect, about two feet high. Leaves oval, acute, serrated, often red, on short foot-stalks. Flowers pale red, in whirls, with the upper leaves. Stamina shorter than the corolla; under segment acute. Jul. Aug. P. On wet ground. *Ger.* 680. 4.
8. *Arvensis. Corn Mint.* Stem procumbent, diffuse, about a foot long, hairy. Leaves oval, acute, serrated, on short foot-stalks. Flowers pale red, in whirls, at the joints. Stamina the length of the corolla; under segment obtuse. July, Sept. P. *Ger.* 684. 2.
9. *Exigua. Smooth Mint.* Stem procumbent, about seven inches long, smooth. Leaves small, smooth, oblong, entire, on short foot stalks. Flowers purplish, in whirls. Aug. Banks of rivulets, &c.

10. *Pulegium.*

10. *Pulegium*. *Pennyroyal*. Stalks numerous, weak, procumbent, about one foot and a half long, subcylindrical, creeping. Leaves oval, obtuse, slightly notched round the edges. Flowers purplish, in thick whirls. Aug. Sept. On wet ground.
11. *Villosa*. *Woolly Mint*. HUDS. I take to be a variety of the *Viridis*.
12. *Hirsuta*. *Hairy Mint*. HUDS. A variety of the *Aquatica*, than which its leaves are rather more hairy and more sessile.

GLECOMA. Antheræ in pairs, cruciform. Corolla ringent. Stigma bifid.

1. *Hederacea*. *Ground Ivy*. Stem square, procumbent, creeping. Leaves reniform, notched, hairy. Flowers blue, in half whirls, in the axæ of the leaves. May. P. In hedges, &c. *Curt.* ii. 44.

LAMIUM. Calyx bearded. Corolla ringent; upper lip intire, arched; under lip of two lobes. Mouth dentated at each side.

1. *Album*. *White dead Nettle*, or *Archangel*. Stem simple, square, about two feet high. Leaves heart-shaped, serrated, pointed, opposite, on foot-stalks. Flowers white, in whirls at the joints. May. June. P. Hedges, &c. *Curt.* ii. 45.
2. *Purpureum*. *Red Archangel*, or *Dead Nettle*. Stem square, partly procumbent, eight or ten inches high. Leaves heart-shaped, roundish, opposite, on foot-stalks. Flowers red, small, in the axæ of

of the upper leaves. May. A. Corn-fields, gardens, &c. *Curt.* i. 42.

3. Amplexicaule. *Great Henbit.* Stalks square, procumbent, about eight inches long: Upper leaves sessile, surround the stem, obtuse; lower leaves waved round the edges, on foot-stalks. Flowers red, in the axæ of the leaves. June. A. Feb. In corn-fields. *Curt.* ii. 46.

GALEOPSIS. Calyx sharp-bearded. Corolla ringent; the upper lip arched, notched; under lip bidentate.

1. Ladanum. *Narrow-leaved Allheal.* Stem square, purplish, about a foot high. Leaves opposite, narrow, serrated. Flowers red, in distant whirls. Jun. Aug. A. In corn-fields, &c. *S. Brit.*
2. Tetrahit. *Nettle-hemp, or Hemp leaved Dead Nettle.* Stem firm, erect, square, branched, hairy, swollen below the joints. Leaves oblong, pointed, serrated, harsh, nervous. Flowers large, white, or purple and yellow, in thick whirls. Calyx spinous, and much less than the corolla. Jun. Aug. A. Corn-fields, &c. *Ger.* 709. 2.
3. Galeobdolon. *Yellow Nettle-hemp.* Stem leaning, square. Leaves oval, serrated, acute. Flowers yellow, six to twelve in each whirl; involucre of four leaves. May. P. In woods, hedges, &c. *Curt.* iv. 40. By Hudson made a distinct genus.

BETONICA. Calyx bearded. Corolla, with the upper lip roundish, intire,  
plane,

plane, erect; under lip trifid; tube filiform. Stamina no longer than the mouth.

1. *Officinalis. Wood Betony.* Stems numerous, simple, erect, square, one foot and a half high. Radical leaves numerous, long, obtuse, on foot-stalks; upper leaves sessile, heart-shaped, hairy. Flowers purple, in half-whirls, forming a kind of spike. Middle segment of the corolla notched. Jul. Aug. Woods, &c. *Curt.* iii. 33.

STACHYS. Calyx pungent. Upper lip of the corolla arched; lower lip large, reflex, notched. Stamina, after shedding the farina, bent towards the sides.

1. *Sylvatica. Hedge-nettle.* Stem erect, square, branched, hairy, about three feet high. Leaves hairy, heart-shaped, soft, on long foot-stalks. Flowers deep purple, with white spots, six or eight in a whirl, forming spikes, with intermediate small leaves. Jul. Aug. P. In woods, hedges, &c. *Curt.* iii. 34.
2. *Palustris. Clown's Allheal.* Stem erect, branched at the bottom, two or three feet high. Leaves sessile, in part surrounding the stem, narrow, pointed, indented, soft, hairy. Flowers purple, in whirls of six or more, forming a spike, with intermediate small leaves. Aug. P. Banks of rivers, &c. *Curt.* iii. 35.
3. *Germanica. Base Horehound.* Stem erect, about two feet high, downy. Leaves thick, wrinkled, downy, white, indented. Flowers numerous, in whirls, white,





antheræ sprinkled with minute glossy glandules.

1. *Cardiaca*. *Motherwort*. Stem erect, about four feet high, with many long upright branches. Leaves on foot-stalks, divided into three principal lobes, serrated. Flowers purplish, in thick divided whirls. July. B. High roads, &c. *Ger.* 705.

\*\* *Calyx bilabiate*.

**CLINOPODIUM.** Involucrum of many narrow leaves, like hairs, beneath each whirl. Upper lip of the calyx trifid, acute, reflex; under lip bifid. Stigma simple, acute, compressed.

1. *Vulgare*. *Great Wild Basil*. Stem erect, hairy, about two feet high. Leaves on foot-stalks, hairy, oval, pointed. Flowers purple, in thick whirls, at the joints. July. P. Hedges, &c. *Ger.* 675. 2.

**ORIGANUM.** Involucrum a square imbricated cone, collecting the calyces, which are various. Corolla ringent.

1. *Vulgare*. *Wild Marjoram*. Stems erect, about two feet high. Leaves on short foot-stalks, oval, pointed, dark green. Spikes roundish, purplish, in irregular panicles; bractæ, oval, longer than the calyx. July. P. Hedges, &c. *Curt.* v. 39.

2. *Onites*. *Pot-marjoram*. Spikes oblong, aggregate, hairy. Leaves heart-shaped, downy. Stems numerous, diffuse, about a foot high. Flowers reddish white. Aug. P. In dry pastures. *Ger.* 664. 2. S. Brit.

THYMUS.

THYMUS. Mouth of the calyx closed with hairs.

1. Serpyllum. *Mother of Thyme, Lemon Thyme, Hoary Thyme.* Stalks branched, procumbent, diffuse. Leaves obtuse, hairy at the base. Flowers pale red, in round heads, terminal. July, Aug. P. On hills, frequent. *Curt.* ii. 47. There are several varieties of this species.
2. Acinos. *Wild Basil.* Stems erect, branched. Leaves pointed, serrated. Flowers purple, in whirls, on single foot-stalks. July, Aug. A. On hills, frequent. *Curt.* i. 43.

MELISSA. Calyx angular, striated; upper lip tridentate, reflex. Upper lip of the corolla erect, arched, notched.

1. Calamintha. *Common Calamint.* Stem erect, much branched, about two feet high. Leaves oval, pointed, serrated. Flowers large, bluish white, on forked pedicles as long as the leaves, forming a kind of spicate panicle. Aug. Corn-fields, &c. *Ger.* 687. 3. S. Brit.
2. Nepeta. *Field Calamint.* Stem reclined. Leaves oval, obtuse, spotted. Flowers purplish white, on forked pedicles longer than the leaf. Aug. P. High-roads, fields, &c. *Ger.* 687. 3.

MELITTIS. Calyx companulate, much wider than the tube of the corolla, plane, erect; middle segment of the under lip notched. Antheræ crossed.

1. *Melissophyllum*. *Bastard Baum*. Stems erect, square, hairy, pithy, a foot and half high. Leaves oval, pointed, hairy, scalloped, dark green. Flowers on single pedicles, six in each whirl, red, with purple spots, or white, with red, spots. June. Woods, hedges, &c. West of England. Pembrokeshire, &c. *Ger.* 690.  
3. 1. S. Brit.

SCUTELLARIA. Calyx short, tubulated, mouth intire, after flowering closed by a cover, so as to resemble a helmet.

1. *Galericulata*. *Hooded Willow-herb*. Stems weak, branched, above a foot high. Leaves heart-shaped, narrow, pointed, on short foot-stalks, scalloped. Flowers blue, in pairs, on pedicles from the axæ of the leaves, pendulous. Aug. P. Banks of rivers, &c. *Curt.* iii. 36.  
2. *Minor*. *Less hooded Willow-herb*. Stalks about eight inches high. Leaves heart-shaped, oval. Flowers purple. Jul. Aug. P. Fens, &c. *Curt.* iv. 43.

PRUNELLA. Stamina forked, with antheræ on one branch only.

1. *Vulgaris*. *Self-heal*. Stem erect, about eight or ten inches high. Leaves, on foot-stalks, ovato-oblong, slightly indented, and somewhat hairy; bractæ heart-shaped, opposite, fringed. Flowers purplish, or white, in dense spikes, terminal. Aug. P. Meadows and pastures. *Curt.* iv. 42.

II. A N-

## II. ANGIOSPERMIA.

Seeds in 'a Capsule.

OROBANCHE. Calyx bifid. Corolla ringent. Capsule ovato-oblong, pointed, unilocular, bivalve. Seeds small, numerous; receptacles four, linear, lateral.

1. Major. *Broom Rape*. Root an imbricated bulb. Stem simple, downy, brown, thick, one to two feet high, with membranes instead of leaves. Flowers in spikes, yellow-purple, terminal. May, Jul. P. Barren pastures, &c. *Curt.* iv. 44.
2. Ramosa. *Branched Broom Rape*, Stem branched, about eight inches high. Flowers pale red; corolla quinquefid. June. Corn-fields, but rare. *Ger.* 1312. 3. S. Brit.

\* *Calyx quadrifid.*

BARTSIA. Calyx of two lobes, notched, coloured. Corolla ringent, less coloured than the calyx; upper lip erect, long; under lip trifid, reflex, small. Capsule bilocular, oval, compressed, bivalve, pointed.

1. Viscosa. *Marsh Eye-bright. Cow-wheat*. Stem round, erect, branched, about a foot high. Leaves sessile, large, pointed, serrated, alternate above. Flowers yellow, single, lateral. Aug. On bogs, &c. in Cornwall. *Lightf.* xiv. p. 321.

2. Alpina. *Mountain Eyebright. Cow-wheat.* Stem not much branched, purplish, erect, eight or ten inches high. Leaves sessile, heart-shaped, obtusely serrated, short, obtuse, nervous, pale dead green. Flowers purple, in leafy spikes, on short pedicles. Aug. Banks of rivers, &c. S. Brit.

RHINANTHUS. Calyx inflated, compressed. Corolla ringent. Capsule obtuse, erect, compressed, bilocular, bivalve. Seeds several, compressed, covered with a loose membrane.

1. Crista Galli. *Yellow Rattle, or Cock's Comb.* Stem round, branched towards the top, about a foot high. Leaves opposite, sessile, long, pointed, serrated. Flowers yellow, in long spikes, chiefly on one side; upper lip of the corolla compressed; calyx smooth. June, July. A. Meadows, &c. *Curt. v. 43.*

EUPHRASIA. Calyx cylindrical; segments unequal. Corolla ringent. Capsule ovato-oblong, compressed, bilocular. Lower lobes of the inferior antheræ sharp-pointed.

1. Officinalis. *Eyebright.* Stem branched, erect, about a foot high; branches opposite. Leaves opposite, sessile, oval, indented, deep green. Flowers white, in the axæ of the leaves. Aug. Sept. A. Meadows, &c. *Curt. v. 24.*
2. Odontites. *Red Eyebright.* Stem erect, branched, above a foot high. Leaves narrow, serrated,

ferrated, pointed, sessile, opposite, often reddish. Flowers red, in the axæ of the leaves, generally on one side of the stem. Aug. Sept. Meadows, &c. *Curt.* i. 44.

MELAMPYRUM. Calyx tubular. Corolla masked; tube curved; upper lip compressed; margin reflex. Capsule oblong, oblique, pointed, compressed, bilocular, bivalve. Seeds two, gibbous.

1. *Cristatum.* *Crested Cow-wheat.* Stem erect, branched, about a foot high. Leaves opposite, long, narrow, sessile. Flowers yellow, or white, or purple, or mixt, in quadrangular, compact, imbricated, obtuse, leafy, terminal spikes. July. A. In woods, &c. S. Brit.
2. *Arvense.* *Purple Cow-wheat.* Stem erect, firm, much branched, about one foot and a half high. Leaves sessile, opposite, long, lance-shaped, indented; those which grow among the flowers are short, broad, lacinated, purple. Flowers yellow and red-brown, in conical leafy spikes. Jul. A. In corn-fields. *Ger.* 90. 1. 3. S. Br.
3. *Pratense.* *Meadow Cow-wheat.* Leaves lance-shaped. Flowers white, closed, with two yellow spots on the under lip, in pairs, in loose spikes, bending one way. Jul. A. In meadows, &c. *Ger.* 91. 1.
4. *Sylvaticum.* *Yellow Cow-wheat.* Stem weak, branched, about a foot high. Leaves on foot-stalks, lance-shaped; those above indented at the base. Flowers yellow, in pairs, bending one way, in loose



loose spikes ; corolla open. June, Aug.  
A. In woods. *Ger.* 91. 1.

**LATHRÆA.** Calyx campanulate. Corolla ringent ; tube longer than the calyx ; upper lip like a helmet, narrow, and hooked at the apex. Nectarium a depressed gland, at the base of the suture of the germen. Capsule roundish, obtuse, with a point, unilocular, bivalve.

1. *Squamaria.* *Tooth-wort.* Root a divided imbricated bulb. Stems several, about eight inches high, without leaves, but with membranes on the lower part. Flowers whitish purple, pendulous, in spikes, unilateral. April, May. *P. H. ox.* xii. 16. 14.

\*\* *Calyx quinquifid.*

**PEDICULARIS.** Upper lip of the corolla like a helmet, compressed, erect, with a beak ; under lip plane, trifid, middle segment least. Capsule ovato-conic, compressed, pointed, oblique, bilocular. Seeds several, truncated.

1. *Sylvatica.* *Common Red Rattle, or Coxcomb.* Stems procumbent, eight or ten inches long, with many spreading branches. Leaves pinnated. Flowers purple, in loose spikes ; calyx oblong, angulated, smooth. May, June. A. In wet meadows, &c. *Ger.* 1071. 2.
2. *Palustris.* *Marsh Red Rattle.* Stems erect, branched, above a foot high. Leaves numerous, pinnated, deeply indented, often brown. Flowers purple, on pedicles,

dicles, in the alæ of the leaves, forming a kind of loose spike; calyx compressed, somewhat bellying, a little hairy, dotted, and often bifid. June. A. Wet meadows, &c. *Pet.* 36. 3.

**ANTIRRHINUM.** Corolla ringent; upper lip bifid, reflex; under lip trifid; palate convex, closing the tube; nectarium extended from the base of the corolla in a kind of spur. Capsule bilocular.

\* *Leaves angular.*

1. *Cymbalaria. Ivy-leaved Toadflax.* Stems procumbent, creeping. Leaves alternate, heart-shaped, 5-lobed, smooth. Flowers single, on pedicles, from the alæ of the leaves, purple and yellow; calyx purple. Spur slender, curved, purple. June, Oct. P. On old walls near London frequent. *Curt.* i. 10. S. Brit.
2. *Elatine. Sharp-pointed Fluellin.* Stem procumbent, branched, about eight inches long. Lower leaves opposite; those above alternate, arrow-shaped, hairy, pale green. Flowers yellow and purple, small. Spur long, small, pointed. Aug. Oct. A. In corn-fields. *Curt.* i. 7. S. Brit.
3. *Spurium. Round-leaved Fluellin.* Stems procumbent, hairy, numerous. Lower leaves on foot-stalks, opposite; those above, alternate, hairy, oval, pointed. Flowers yellow and purple, with a long spur. Jul. Sept. A. In corn-fields. *Curt.* iii. 37. S. Brit.

\*\* *Leaves*

\*\* *Leaves opposite.*

4. Repens. *Creeping Toad flax.* Stems procumbent. Leaves narrow, four together, in whirls. Flowers violet and yellow, with a long sharp spur, in long loose leafy spikes. Jul. Sept. P. In hedges in Cornwall. S. Brit.
5. Arvense. *Blue Corn-Toadflax.* Stem erect. Leaves narrow, in whirls. Flowers blue, in spikes; calyx hairy, viscid. July, Aug. A. Corn-fields, &c. S. Br.

\*\*\* *Leaves alternate.*

6. Monspeffulanum. *Sweet-smelling Toadflax.* Stems numerous, slender, erect. Leaves sessile, narrow, numerous, thick set. Flowers blue, with a very short spur, in spikes. terminal. July, Sept. P. Corn-fields. S. Brit.
7. Linaria. *Common Yellow Toadflax.* Stem firm, erect, about two feet high. Leaves sessile, lance-shaped, blue-green, numerous. Flowers pale and deep yellow, with a long curved spur, in short spikes. July P. Meadows, &c. Curt. i. 47.
8. Minus. *Least Toadflax.* Stem much branched, diffuse. Leaves lance-shaped, obtuse, viscid. Flowers small, with a very short spur, purple and yellowish white, in the axæ of the leaves. June, Sept. A. Curt. v. 41. S. Brit.

\*\*\*\* *Corolla gaping, without spur. Leaves alternate, intire.*

9. Majus. *Great Snapdragon.* Stem erect, near three feet high. Leaves lance-shaped,  
on

on foot-stalks. Flowers purple, large, in naked spikes; calyx small, segments rounded. June. B. On old walls, &c. *Ger.* 549. 1. S. Brit.

10. *Oronticum*. *Least Snapdragon*. Stem erect, about a foot high. Leaves narrow. Flowers few, dispersed, purple, with a little yellow; calyx longer than the corolla. July, Aug. A. Corn-fields. *Curt.* iv. 45. S. Brit.

**SCROPHULARIA.** Segments of the calyx unequal. Corolla somewhat globose; tube wide, open; segments small; upper segments erect, with a bifid scale at their base; lateral segment spreading; lower segment reflex. Capsule roundish, pointed, bivalve, bilocular.

1. *Nodosa*. *Common Figwort*. Root tuberous. Stem square, about three feet high, brown. Leaves heart-shaped, on foot-stalks, indented, opposite. Flowers greenish purple, in bunches, terminal. July P. In woods and hedges, &c. *Ger.* 716. 1.

2. *Aquatica*. *Water Figwort*, or *Betony*. Root fibrous. Stem erect, square, about four feet high. Leaves opposite, elliptical, pointed, slightly scalloped, on decurrent foot-stalks. Flowers purple, in loose, naked spikes, terminal. July. P. In water. *Curt.* v. 44.

3. *Scorodonia*. *Baum-leaved Figwort*. Stem erect, square, about two feet high. Leaves opposite, doubly serrated. Flowers dusky purple, in composite bunches, terminal.

minal. Aug. P. Banks of rivulets, &c. in Cornwall, &c. *H. ox.* 35. row 2. f. 2. S. Brit.

4. *Vernalis. Yellow Figwort.* Stalks square, hairy, brown, about two feet high. Leaves heart-shaped, roundish, hairy, indented, opposite. Flowers yellow, on single forked pedicles from the axæ of the leaves. April, May. P. In hedges in Surry, &c. *Ger.* 717. 3.

**DIGITALIS.** Calyx of five segments, permanent. Corolla campanulate bell-shaped on the backside, quadrid; base cylindrical, narrow. Capsule oval, bilocular, bivalve.

1. *Purpurea. Foxglove.* Stem erect, firm, about four feet high. Leaves, on short footstalks, elliptical, pointed, downy, slightly serrated. Flowers purple, in long, terminal, unilateral spikes. July P. In hedges, &c. *Curt.* i. 48.

**SIBTHORPIA.** Calyx of five segments, spreading. Corolla of five segments, rounded, spreading, equal, the length of the calyx. Stamina in pairs, approximate. Capsule compressed, orbicular, bilocular, partition transverse.

1. *Europæa. Bastard Moneywort.* Stems slender, creeping. Leaves small, round, notched round the edges. Flowers in the axæ of the leaves, pale red, small. July, Sept. P. Banks of rivulets in Cornwall, &c. S. Brit.

LIMO-

LIMOSELLA. Calyx quinquifid, erect, acute, permanent. Corolla campanulate, quinquifid, nearly equal, acute, small. Stamina in pairs, approximate. Capsule unilocular bivalve. Seeds many. Receptacle oval large.

1. Aquatica. *Bastard Plantain*. Stems slender, creeping. Leaves lance-shaped, on long foot-stalks, in tufts, on the ground. Flowers small, single, white, reddish within; stamina black. July, Sept. A. In pools of stagnant water. *H. ox.* xv. 2. r. 2. f. 2.

## C L A S S    X V.

## TETRADYNAMIA.

Calyx a perianthium of four leaves. Corolla of four leaves, equal, cruciform. Stamina six, two of which are shorter than the rest. Pistillum one; germen above the receptacle,

## I. SILICULOSA.

Pericarpium small, round, with the apex of the dissepiment extended beyond the valves.

\* *Apex of the pod intire.*

MYAGRUM. Calyx coloured, deciduous. Pod somewhat heart-shaped: valves concave; apex conic, rigid.

1. *Sativum. Gold of Pleasure.* Stem single, branched, about two feet high. Leaves oblong, sessile, arrow-shaped, serrated. Flowers in tufts, pale yellow. Seeds yellow, numerous. Jun. A. Among flax frequent. *Ger.* 273. 3.

VELLA. Pod globose, bilocular; dissepiment double the length of the valves, beyond which it is oval, erect.

1. *Annua. Crefs Rocket.* Stem erect, branched, about a foot high. Leaves pinnatifid, segments narrow. Flowers pale yellow, in spikes terminal. Pods pendulous. Jun. A. On high ground. *Ger.* 247. 4. S. Brit.

SUBU-



SUBULARIA Pod inversely oval. Valves oval, concave, contrary to the partition. Style shorter than the pod.

1. Aquatica. *Awl-wort*. Stem naked, one inch in height. Leaves awl-shaped, in clusters round the root. Flowers small, white, four or five, under water. *H. ox.* viii. 10. 29. Jul. A. In lakes in Ireland, Scotl. Wales. *H. ox.* 8. 10.

DRABA. Pod oblong-oval, compressed, bilocular; dissepiment parallel to the valves, without style.

1. Verna. *Common Whitlow Grass*. Stalks naked, about four inches high. Radical leaves oblong, obtuse, slightly indented, in a tuft on the ground. Flowers small, white, in loose panicles. April. On walls, &c. *Curt.* i. 49.

2. Muralis. *Speedwell leaved Whitlow Grass*. Stem branched, hairy, eight or ten inches high. Leaves broad, heart-shaped, hairy, embracing the stem, serrated. Flowers small, white, in long loose spikes. Pods elliptical, pointed at each end. Seeds many, yellow. May. A. In fissures of rocks, &c. *H. ox.* iii. 20 5. S. Brit.

3. Incana. *Hoary Whitlow Grass*. Stem eight or ten inches high. Leaves numerous, hoary, indented. Flowers small, white. Pod oblong, twisted. May. P. In fissures of rocks, high pastures, &c. in the North. *Pet.* 48. 3.

\* \* *Apex of the Pod notched.*

LEPIDIDIUM. Pod heart-shaped, compressed, containing several seeds. Valves acutely carinated contrary-wise.

1. *Petræum. Mountain Dittander.* Stem single, simple, about four inches high. Leaves pinnated, intire. Petals white, round, notched, less than the calyx. Calyx whitish, tipped with yellow. April, May. A. On St. Vincent's rock. S. Brit.
2. *Latifolium. Dittander, or Pepper-wort.* Stem firm, much branched, three or four feet high. Leaves on foot-stalks, ovato-lance-shaped, serrated. Flowers small, white, numerous, terminal. June, July. P. In meadows, &c. but rare. *Ger.* 241. 2.
3. *Ruderales. Narrow-leaved wild Cress, or Dittander.* Flower diandria, without petals. Radical leaves pinnated, dentated; the rest intire. June. B. On the coast. *Ger.* 262. 4.

THLASPI. Pod obcordate, containing several seeds. Valves navicular, marginato-carinated.

1. *Arvense. Treacle Mustard, or Penny-Cress.* Stalk firm, about a foot high, branched. Leaves oblong, smooth, scalloped, broadest towards the end. Flowers white. Pods round. June, July. A. In corn-fields, but rare. *Ger.* 262. 1.
2. *Hirtum. Perennial Mithridate Mustard.* Stem simple, hairy, about a foot high. Radical leaves oval, hairy; the rest downy, soft,

soft, arrow-shaped, in part embracing the stalk. Calyx white. Petals white, oval, intire. Pods roundish, hairy. July. A. On the mountains in Wales. *Pet.* 50. 10. S. Brit.

3. *Campestre.* *Mithridate Mustard*, or *Bastard Cress*. Stem firm, erect, downy, branched towards the top. Radical leaves sinuated, on foot-stalks; the rest arrow-shaped, downy, indented, bluish, sessile. Flowers white. Calyx with brown spots. Pods roundish. June, July. B. Corn-fields, &c. *Curt.* v. 45.

4. *Montanum.* *Mountain Mithridate Mustard*. Stalks several, firm, about six or eight inches high. Radical leaves oval, dark bluish, smooth, intire, thick, in a round tuft; the rest embrace the stem. Flowers small, white; corolla longer than the calyx. Pods pear-shaped. July. P. On the mountains in Yorkshire, &c. *Ger.* 268. 6. S. Brit.

5. *Perfoliatum.* *Perfoliate Treacle Mustard*. Stalk simple, from four inches to near a foot high. Radical leaves oval, on short foot-stalks; those above heart-shaped, perfoliate, slightly indented, tapering to a point. Flower white; corolla scarce longer than the calyx. Stamina white, longer than the corolla; antheræ yellowish. Pods like *Shepherd's Purse*. June. A. On high limestone pastures. *Ger.* 268. 7. S. Brit.

6. *Burfa Pastoris.* *Shepherd's Purse*. Stalks branched, firm, about a foot high. Radical leaves pinnatifid; those above embrace

the stem. Flowers white. Pods flat, heart-shaped. March, Sept. A. Very common. *Curt.* i. 50.

COCHLEARIA. Pod heart-shaped, notched, turgid, rough; valves gibbous, obtuse.

1. *Officinalis*. *Common, or Garden Scurvey-grass*. Stalks numerous, weak, about a foot high. Radical leaves roundish; those above, oblong, narrow, opposite. Flowers white, in small tufts, terminal. April, May. P. On the coast, and on mountains. *Ger.* 401. 1.
2. *Anglica*. *English or Common Sea Scurvey-grass*. Stalks slender. Leaves ovato-lance-shaped, sinuated; those from the root fleshy. Flowers small, white. May. P. On the coast. *Ger.* 401. 2.
3. *Danica*. *Danish Scurvey-grass*. Stalks numerous, about eight inches high. Leaves triangular, resembling ivy, fleshy, on foot-stalks. Flowers small, white. May. P. On the Lancashire coast. *Fl. dan.* 100.
4. *Groenlandica*. *Groenland Scurvey-grass*. Stalks numerous, weak, with few branches, about six inches high. Leaves kidney-shaped, fleshy, intire; those from the root convex beneath, on long foot-stalks. Flowers white. April, May. P. On mountains in Wales, &c. Is this a variety of the *Officinalis*?
5. *Coronopus*. *Swine's Cresses*. Stalks numerous, branched, procumbent. Leaves pinnatifid; segments narrow, notched on each

each side at the end. Flowers white, in the axæ of the leaves. June, July. High-roads, &c. frequent. *Ger.* 427. 2.

6. *Armoracia*. *Horfe-radish*. Stem erect, near three feet high. Radical leaves a foot and half long, lance-shaped, notched in the edges; those on the stem indented. Flowers small, white, terminal. May. P. Among rubbish, ditches, &c. in the North. *Ger.* 241. 1. S. Brit.
7. *Didyma*. *Double-podded Scurvey-grass*. Leaves alternately pinnatifid. Stems procumbent, hairy, 3-angular, a foot long. Flowers small, white, on long stalks. *Lepidum anglicum*, Hudf. and *didymum*. With. S. Brit. Jun. Jul.

IBERIS. Exterior petals largest; the other two reflex. Pod erect, roundish, compressed, bilocular; margin acute; valves navicular, carinated. Seeds several.

1. *Nudicaulis*. *Rock Cress*. Stalks erect, naked, simple, about four inches high. Leaves pinnatifid. Flowers white, small, terminal. May. Jul. Aug. On gravelly soil. *Ger.* 276. 2.
2. *Amara*. *Bitter Candy-tuft*. Leaves lanceolate, acute, sub-dentate. Flowers in clusters. Smaller than the common candy-tuft. Jun. Jul. A. *Ger.* 263 5. S. Brit.

## II. SILIQUOSA.

Pod long, with a short apex.

\* *Calyx closed, its leaves longitudinally connivent.*

DENTARIA. Pod cylindrical, bilocular, bivalve, bursting elastically; valves rolling upward. Stigma notched.

1. Bulbifera. *Coralwort*. Stalks erect, weak, about a foot high. Upper leaves simple; lower leaves pinnated; pinnæ seven. Black berries in the axæ of the leaves. Flowers white, or reddish. April. P. In woods. *Ger.* 984. 1. S. Br.

ERYSIMUM. Pod long, straight, quadrangular, bivalve, bilocular. Seeds several, small.

1. Officinale. *Hedge Mustard*. Stem a little branched erect, two or three feet high. Leaves harsh, deeply sinuated. Flowers yellow, in long spikes, terminal. Pods pressed close to the stem. June. Jul. P. On waste ground. *Curt.* v. 50.
2. Barbarea. *Winter Cresses*, or *Rocket*. Stem branched, near two feet high. Leaves pinnatifid, with a large roundish segment at the end. Flowers yellow, terminal. May, June. P. In ditches. *Ger.* 243.
3. Alliaria. *Jack by the Hedge*, or *Sauce alone*. Stalks erect, with few branches, yellowish, two or three feet high. Leaves  
on

on foot-stalks, single, heart-shaped, indented. Flowers white, terminal. May. P. Under hedges. Smells like garlick. Ger. 794.

4. *Cherianthoides*. *Treacle Wormseed*. Stem erect, firm, branched towards the top. Leaves numerous, sessile, lance-shaped, intire. Flowers small, yellow, terminal. July. A. In fens frequent. Ger. 273. 4.

**CHEIRANTHUS.** Two opposite leaves of the calyx gibbous at the base. Ger-men angular, with a glandular tubercle on each side. Seeds several, pendulous, alternate, flat.

1. *Cheiri*. *Wall-flower*. Stem firm, erect, branched. Branches angular. Leaves sessile, lance-shaped. Flowers yellow, in spikes, terminal. April, May. P. On walls, &c. Ger. 456. 1.
2. *Tricuspidatus*. *Sea Wall-flower*, or *July-flower*. Stalks numerous, weak, branched, somewhat hairy. Leaves narrow, deeply sinuated, hairy, pale, sessile. Flowers white, terminal. Pods with a triple apex. June, July. On the coast of Wales and Cornwall. S. Brit.
3. *Erysimoides*. *Wild July-flower*. Leaves lanceolate, dentate, naked. Stem simple, erect, square. Ger. 457. 4. June, July. B. S. Brit.
4. *Sinuatus*. *Hoary Sea July-flower*. Leaves woolly, obtuse, somewhat indented. Pods prickly. Stem erect. Ger. 460. 2. June, July. B.



HESPERIS. Petals bent obliquely. Two opposite leaves of the calyx gibbous at the base. A melliferous gland between the short stamina. Style o. Stigma forked at the base; apex connivent. Pod straight.

1. *Matronalis*. *Unfavorable Dame's Violet*. Stem simple, erect. Leaves ovato-lance-shaped, denticulated. Flowers large, purplish white; petals notched at the apex. May. P. On the banks of rivers in the North. *Ger.* 462. 1.

ARABIS. Two opposite leaves of the calyx larger, and gibbous at the base. Four nectariferous glands, like scales, reflex, between the leaves of the calyx: Stigmata simple.

1. *Thaliana*. *Coded Mouse-ear*. Stalks numerous, erect, branched, about eight inches high. Radical leaves on foot-stalks, intire, ovato lance-shaped, hairy, numerous, in a round tuft; those on the stem sessile, and often smooth. Flowers white. Mar—May. A. On walls, &c. *Curt.* ii. 49.
2. *Stricta*. *Rough A.* Leaves notched, hairy, half-sheathing the stem, those of the root spatulate, numerous. Stems many, six inches. Flowers white, large, in clusters. Pods erect, 2-edged. *Huds.* May. A. S. Brit.
3. *Turrita*. *Tower A.* Calyx wrinkled. Leaves sheathing the stem. Pods declining, flat, ligulate. Stem 12 inches. Flowers pale yellow. June. A. *With.* *Ger.* 272. 2. S. Brit.

TUR-

TURRITIS. Pod very long, straight, angular. Calyx erect. Corolla erect.

1. *Glabra*. *Great Tower Mustard*. Stem erect, simple, about a foot and half high. Radical leaves rough, sometimes intire, sometimes indented, in a round tuft; the rest smooth, arrow-shaped, embrace the stem. Flower small, greenish white, in a long spike, terminal. May. A. In meadows, &c. *Curt.* iv. 47. S. Brit.
2. *Hirsuta*. *Hairy Tower Mustard*. Stem erect, about 9 inches high. Radical leaves sessile, hairy, in a thick tuft; the rest hairy, embracing the stem. Flowers small, white, in a spike, terminal. June. On rocks and old walls. *H. ox.* iii. 3. 5.

BRASSICA. Two nectariferous glands between the shorter stamina and pistillum; and two between the longer and the calyx. Seeds globose.

1. *Orientalis*. *Perfoliate Cabbage*. Stem erect, branched, 3 feet high. Radical leaves rough, intire; the rest smooth, heart-shaped, embracing the stem. Flowers white, small, in long spikes. Pods long, square. June. In corn-fields, &c. *Ger.* 536. 2. S. Brit.
2. *Napus*. *Wild Nenev*. Stem erect, about 3 feet high. Radical leaves deeply sinuated, smooth; the rest heart-shaped, oblong, embracing the stem, slightly indented. Flowers yellow; calyx spreading. Root taper. May. P. On the banks of ditches, &c. *Ger.* 235. 2.
3. *Rapa*.

3. Rapa. *Turnip*. Stem erect, about 3 feet high, Radical leaves rough, deeply sinuated, large. Flowers yellow. Root orbicular, depressed. Apr. B. In fields, &c. *Ger.* 232. r. S. Brit.
4. Oleracea. *Sea Cabbage*. Root cylindrical, fleshy. Stem thick and spongy, about 3 feet high. Leaves large, thick scalloped. Flowers yellow. Seeds purplish brown. Apr. On Dover-cliff, &c. *Pet.* 45. 6. S. Brit.

RAPHANUS. Nectariferous glands like the preceding genus. Pod bunched-out by the seed, and jointed.

1. Raphanistrum. *Bastard Radish*, or *white or yellow flowered Charlock*. Leaves rough, sinuated, on foot-stalks. Pods cylindrical, smooth, unilocular. June, July. A. In corn-fields, *Curt.* iv. 46.

\* \* *Calyx spreading.*

CARDAMINE. Pod slender, roundish; Valves bursting elastically, and rolling back. Stigma intire. Calyx spread a little. *Lady's-smock*.

1. Bellidifolia. *Daisy-leaved Ladysmock*. Stem simple, 3 or 4 inches high. Radical leaves oval, simple, intire, on long foot-stalks; the rest generally sessile. Flower white, sometimes purplish; calyx brown. Pod large. April, May. P. On the Welsh mountains, &c. *H. ox.* iii. 4. S. Brit.
2. Petræa. *Mountain L.* Stem simple, about 4 inches high. Leaves oblong, dentated. Flowers

Flowers large and white. May. P. On high mountains in Wales. *Lightf.* xv. p. 353.

3. *Impatiens*. *Impatient L.* Stem erect, near a foot high. Leaves pinnated; pinnæ cut at the edges. Petals 0. April. On the mountains in the North. *Ger.* 260. 7.
4. *Parviflora*. *Small-flowered L.* Stem 6 or 8 inches high. Leaves pinnated, lance-shaped, obtuse, but little dentated, smooth, and without stipulæ. Flowers white, small. Pods erect, on horizontal pedicles. Apr. May. In meadows and banks of rivers frequent. Is this a variety of the next?
5. *Hirsuta*. *Hairy L.* Stems slender, inclining, branched, 8 or 10 inches. Leaves pinnated, hairy. Flowers white, tetrandria, in naked spikes. Seeds 4 or 6. April—Aug. In meadows, &c. frequent. *Curt.* iv. 48.
6. *Pratenfis*. *Common L. or Cuckow-flower.* Stem hard, firm, almost naked, about a foot high. Leaves pinnated; pinnæ from the root roundish, those on the stalk lance-shaped. Flowers large, white, or purplish. Apr. P. In wet meadows, &c. frequent. *Curt.* iii. 40.
7. *Amara*. *Bitler L.* Stalk but little branched, about two feet high. Leaves pinnated; pinnæ somewhat angular. Flower large, white, on shoots from the axæ of the leaves. April, May. In wet pastures. *Curt.* iii. 39.

SISYMBRIUM. Pod curved, bursting; valves after bursting nearly straight.  
Calyx

Calyx and corolla spreading. Seeds several, small.

\* *Pods declining, short.*

1. *Nasturtium. Water Cresses.* Stem weak, branched. Leaves pinnated, somewhat heart-shaped. Flowers small, white, in tufts, terminal. June. B. In shallow streams. *Ger.* 257.
2. *Sylvestre. Water-Rocket.* Stem weak, branched, above a foot high. Leaves pinnated; pinnæ lance-shaped, serrated. Flowers small, yellow. June. P. In shallow water frequent. *Curt.* iii. 41.
3. *Amphibium. Water Radish.* Stem firm, erect, 2 or 3 feet high. Leaves pinnatifid, serrated. Flowers yellow, in spikes. Pods somewhat oval, short. June. P. In water. *Ger.* 234. 2.
4. *Terrestre. Land Rocket.* CURT. Leaves pinnatifid. Pods filled with seed. Root annual, white. Stem angular, red-green, smooth. June—Sept. A. *Curt.* v. 49. S. Brit.

\*\* *Stalks naked.*

5. *Murale. Wall Rocket.* Stems rough, about 8 inches high. Leaves on foot-stalks, lance-shaped, smooth, sinuated, serrated. Flowers yellow. Pods a little compressed, and slightly carinated. May, July. P. On sandy ground in the North, Anglesea, &c. *Brassica Muralis* of Hudf. *Curt.* iii. 38.

6. *Monense.*

6. Monense. *Yellow Rocket*. Stem smooth, about 6 or 8 inches high. Leaves pinnatifid; pinnæ remote, generally 7 pair. Flower yellow; petals intire; calyx closed. June. In the Isle of Man. *Brassica* of Hudf. *Lightf.* xv. p. 353,—not xxv. p. 347, as quoted in *With.*

\*\*\* *Leaves bipinnated.*

6. Irio. *Broad-leaved Rocket*, or *Hedge Mustard*. Stem smooth, about 2 feet high. Leaves broad, naked, pinnated, halberd-shaped at the end. Flowers yellow. Pods erect. May—Aug. A. On waste ground. *Curt.* v. 48. S. Brit.
7. Sophia. *Flixweed*. Stem firm, branched, 2 or 3 feet high. Leaves multifid; segments narrow. Flowers yellow; petals much less than the calyx. Pods long, stiff, curved, without style, erect. Seeds minute, yellow. July. A. On walls, waste ground, &c. *Ger.* 1068. 1.

SINAPIS. Calyx spreading. Claws of the petals erect. Two glandules between the short stamina and pistillum, also between the longer and the calyx. Pods spongy within, bursting.

1. Arvensis. *Wild Mustard*, or *Charlock*. Stem branched, about a foot and half high. Leaves broad, harsh, deeply sinuated, serrated, resembling those of the turnip. Flowers yellow. Pods multangular, torose, with a long beak. Seeds brown. June, July. A. Corn-fields, waste ground, &c. A. *Curt.* v. 47.

2. Alba.

2. Alba. *White Mustard*. Stem branched, hairy, about 2 feet high. Leaves large, rough, deeply sinuated. Flowers yellow. Pods hairy, spreading, with a very long oblique beak. Seeds white, or reddish. July, August. A. Waste ground, &c. *Curt. v. 46.*
3. Nigra. *Common Mustard*. Stem branched a little, 3 feet high. Lower leaves rough, deeply sinuated; upper leaves smooth, entire. Calyx yellow. Pods erect, smooth, quadrangular. Seeds brown. June. A. On waste ground. *Ger. 244. 1.*

BUNIAS. Calyx spreading, deciduous. Pod irregular, quadrangular; sides unequal, ovato-oblong, with points, deciduous.

1. Cakile. *Sea Rocket*. Stem partly procumbent. Leaves oblong, indented. Flowers pale purple. Seed single. June. A. On the coast frequent. *Ger. 248. 5.*

ISATIS. Calyx coloured. Style o. Pod oblong, lance-shaped, obtuse, compressed, two-edged, unilocular, bivalve; valves navicular, carinated, deciduous.

1. Tinctoria. *Woad*. Stem firm, erect, about 4 feet high. Leaves long, pointed, thick, bluish; those from the root notched, the rest arrow-shaped. Flowers yellow. Seed single. July. B. In the fields between Bath and Bristol, &c. *Ger. 491. 2.* S. Brit.

CRAMBE.



CRAMBE. Four longer stamina bifid at the apex. Berry dry, unilocular, deciduous. Seed one.

1. Maritima. *Sea Colewort*. Stem erect, branched, smooth, near 3 feet high. Leaves large, smooth, bluish, waved at the edges, heart-shaped, fleshy. Flowers whitish. May. P. On the coast. *Ger.* 248. 16.

CLASS

## C L A S S XVI.

## M O N A D E L P H I A.

Stamina in one set, united below.

## I. D E C A N D R I A.

Stamina 5 or 10.

GERANIUM. *Crane's-bill*. Calyx of 5 leaves, permanent. Pistillum 1; style subulate, long, permanent; stigmata 5, reflex. Capsule long, taper, with 5 cells, each containing a single seed.

\* *Stamina* 5.

1. *Cicutarium*. *Hemlock-leaved C.* Stem branched, weak. Leaves pinnated, indented, obtuse. Flowers red, 3 or more on each pedicle. April—June. Waste ground, &c. *Curt. i.* 51.
2. *Moschatum*. *Musk C.* Differs from the last in the leaves being broader, and more intire, and in smelling like musk. May. A. In dry meadows, &c. *Ger.* 941. S. Brit.
3. *Maritimum*. *Sea C.* Stem prostrate, branched. Leaves heart-shaped, cut and notched at the edges, obtuse, somewhat hairy. Flowers pale red, generally two on each pedicle. June, July. On the Western coast. S. Brit.

4. *Pim-*

4. *Pimpinellifolium*. *Burnet-leaved C.* CURT. cat.  
Flowers many. Stamina 5. Leaves pinnated. Stem branched. Two upper petals spotted at the base. Sandy ground.  
*With.*

\* \*. *Stamina* 10.

5. *Phæum*. *Spotted C.* Stem erect, 2 or 3 feet high, branched. Leaves alternate, downy, 5-lobed, serrated. Flowers dark purple, 2 on each pedicle; petals waved. Calyx soft, with a short spine. April, May. On high ground. *Ger.* 942. 3. S. Brit.

6. *Nodosum*. *Knotty C.* Stem branched, about a foot high, with thick joints, generally red. Leaves trilobed, serrated. Flowers red, 2 on each pedicle. July, Aug. P. On the mountains in the North. *Ger.* 947. 2. S. Brit.

7. *Sylvaticum*. *Mountain C.* Stem erect, about 2 feet high. Leaves roundish, multifid, serrated. Flowers purplish red, large; 2 on each pedicle; petals notched. July, Aug. P. On the mountains in the North. *Ger.* 942. 2.

8. *Pratense*. *Crowfoot C.* Stem erect, a foot and half high. Leaves roundish, quinquifid; lobes branched, trilobed, pinnated, acute, wrinkled. Flowers blue; petals intire, large; 2 flowers on each pedicle. June, July. P. In moist pastures, &c. *Curt.* iv. 49.

9. *Robertianum*. *Herb Robert.* Stem branched, spreading, jointed, reddish. Leaves hairy, pentagonal, trifid; lobes pinnatifid. Flowers red; calyx hairy, 10-angular.

Two flowers on each pedicle. April—June. In hedges, &c. *Curt.* i. 52.

10. *Lucidum*. *Shining Dovesfoot C.* Stem branched, about a foot high, reddish, glossy. Leaves of 5 lobes, rounded, smooth. Flowers red, two on each pedicle; calyx pyramidal, angular, wrinkled. June, July. A. On walls, &c.
11. *Rotundifolium*. *Round-leaved C.* Stem prostrate, about a foot long, branched. Leaves small, kidney-shaped, divided into many segments. Flowers small, blue, two on each pedicle; petals intire, the length of the calyx. Jul. On walls, &c. *Ger.* 938.
12. *Molle*. *Common Dovesfoot C.* Stem branched, diffuse, weak, about a foot high. Leaves very broad, soft, kidney-shaped, quinquepartito-multifid; floral leaves alternate. Petals purple, bifid. Capsule hairy. May. A. Fields and hedges. *Curt.* ii. 50.
13. *Difsectum*. *Jagged-leaved Dovesfoot C.* Stem branched, leafy, erect, above a foot high. Leaves on long foot-stalks, in 5 lobes, multifid; segments very narrow. Flowers red, 2 on each long pedicle; petals notched. Capsule woolly. May, June. A. In meadows, &c.
14. *Columbinum*. *Long-stalked Dovesfoot C.* Stem branched, prostrate. Leaves somewhat hairy, semicircular, deeply divided into 5 segments; middle lobes trifid, segments acute. Flowers two, reddish blue, on very long pedicles; calyx bearded; capsule smooth. June—Aug. A. In cornfields, &c.



purplish, small, sessile, crowded round the joints; calyx smooth, spreading. Jul. A. On sandy ground, in Kent, &c. S. Brit.

3. *Sylvestris*. *Common M.* Stem erect, firm, about 3 feet high. Leaves waved, in 5 or 7 lobes, obtuse, serrated, on hairy footstalks. Flowers purple, on hairy pedicles, from the axæ of the upper leaves; petals heart-shaped. May—Nov. On waste ground frequent. *Curt.* ii. 51.
4. *Moschata*. *Jagged-leaved Vervain M.* Radical Leaves kidney-shaped, cut a little at the edges; those above quinquepartite, pinnato-multifid. Flowers like the last. Jul. Aug. B. Meadows, &c. *Curt.* iv. 50.

**LAVATERA.** Exterior calyx trifid; otherwise like the two last genera.

- i. *Arborea*. *Sea Tree-Mallow.* Stem woody. Leaves heptangular, folded, downy. Flowers, on pedicles, single, from the axæ of the leaves, in whirls. Aug. P. On the coast.

CLASS XVII.

DIADELPHIA.

Flowers papilionaceous, generally of four irregular petals. Stamina, generally, in two sets, viz. one consisting of nine filaments, the other of one. Pericarpium generally a *Legumen*; that is, a pod, like our common Garden Pea.

I. HEXANDRIA.

Stamina 6.

FUMARIA. *Fumitory*. Calyx of 2 leaves, equal, erect, acute, permanent. Corolla ringent, monopetalous, with a blunt spur. Filaments 2, with 3 antheræ on each. Seed single, inclosed in a loose membrane.

1. *Officinalis*. *Fumitory*. Stems numerous, weak, intricate, branched, about a foot high. Leaves doubly pinnated: pinnæ trilobed; lobes bifid, and trifid. Flowers pink and deep purple, in long spikes, terminal. April—June. A. In fields and waste ground frequent. *Curt.* ii. 52.

2. *Capreolata*. *Ramping F.* Stems numerous, weak, near 2 feet high. Leaves of many segments, terminating in a tendril. Flowers pale red, in long loose spikes. Aug. A. Hedges, &c.

P 3

3. *Clavi-*



3. *Claviculata. Climbing F.* Stems weak, branched, about a foot high. Leaves broad, bluish, with tendrils. Flowers purplish white, in spikes terminal. Pods linear. June. A. Hedges, &c. *Ger.* 1088. 2.

## II. OCTANDRIA.

Stamina 8.

POLYGALA. Calyx of 5 leaves, 2 of which are like wings, and coloured, Corolla of 4 petals. Pod heart-shaped, bilocular. Seed single, oval.

7. *Vulgaris. Milkwort.* Stems prostrate, branched, about 6 inches long. Leaves narrow, pointed, intire, sessile, irregular. Flowers crested, blue, or reddish, or white, in spikes, terminal. May, June. P. Heaths, &c. *Ger.* 564.

## III. DECANDRIA.

Stamina 10.

SPARTIUM. Calyx small, quinquedentate, coloured. Corolla papilionaceous, of 5 petals, the carina consisting of 2. Stigma longitudinal, woolly above. Filaments adhering to the carina.

1. *Scoparium. Common Broom.* A shrub about 4 feet high. Branches angular, without spines. Leaves ternate and single, narrow. Flowers large, yellow. May, June. P. In dry pastures, &c. *Curt.* v. 52.

GENIS-

GENISTA. Calyx small, bilabiate, quin-  
quedentate. Vexillum bent backward  
by the pistillum and stamina, distant  
from the carina, which is longer than  
the vexillum.

1. Tinctoria. *Dyers Weed*, or *Broom*. A low shrub,  
with many stems. Branches striated,  
erect. Leaves lance-shaped, single,  
smooth, numerous. Flowers yellow, in  
close spikes, terminal. July. In pas-  
tures, &c. *Ger.* 1316. 1.
2. Anglica. *Needle Furze*, or *Petty Whin*. A low  
shrub, erect, with many branches.  
Spines simple, and on the older branches  
only. Leaves lance-shaped. Flowers  
yellow, in spikes. May, June. On moist  
heaths, &c. *Ger.* 1320. 4.

ULEX. Calyx of 2 leaves, quinquedentate,  
Corolla of 5 leaves. Pod almost covered  
by the calyx.

1. Europæus. *Common Furze*, *Whins*, or *Gorse*.  
Leaves narrow, taper, acute, downy.  
Spines firm, numerous. Flowers yellow,  
in spikes, terminal. April, May. On  
commons frequent. *Ger.* 1319. 1.

ONONIS. *Restharrow*. Calyx in 5 seg-  
ments, almost as long as the corolla;  
segments acute. Vexillum heart-shaped,  
striated. Pod turgid, sessile.

1. Spinosa. *Spinous R.* Stems several, tough,  
red, not erect, a foot and half high.  
Leaves narrow, pointed, serrated, nu-  
merous, ternate. Branches spinous.  
Flowers purple, on short pedicles, from  
the

the alæ of the leaves. June, Aug. In barren pastures, *Ger* 1322. 1.

2. *Arvensis*. *Corn R*. Stem about two feet high, much branched, and leafy. Branches without spines. Leaves oval, somewhat hairy, serrated, viscid, on long footstalks, from long bivalve sheaths. Flowers red, in spikes, terminal. July, Aug. In barren pastures, &c. *Ger*. 1322. 3.

3. *Repens*. *Creeping R*. Stem diffuse. Branches erect. Leaves numerous. oval, downy, ternate; stipulæ oval. Flowers in the alæ of the leaves, red, whitish. June, July. P. On the coast.

ANTHILIS. Calyx a little inflated, hairy, quinque-dentate, unequal. Pod roundish, small, concealed within the calyx.

1. *Vulneraria*. *Kidney Vetch*, or *Lady's Finger*. Stem near a foot long, generally prostrate. Leaves pinnated; pinnæ several pair, with a larger one at the end. Flowers yellow, sometimes red, on slender pedicles, in a double head. Jul. P. In dry pastures, &c. *Ger*. 1060. 1.

PISUM. Calyx quinquefid; two upper segments broadest. Style triangular, downy, carinated above. Pod large. Seeds several, round.

1. *Marinum*. *Sea Pease*. Root very long. Stems weak, angular, two or three feet long. Leaves pinnated, terminated by a tendril; stipulæ arrow shaped. Flowers pale red and purple, in clusters, on naked

naked pedicles. July. P. On the Sussex coast, &c. *Ger.* 1220. 5. S. Brit.

**OROBUS.** Calyx quinque-dentate, tubular, obtuse at the base; three lower teeth sharper; upper teeth shorter, and deeply divided. Style filiform, bent upward. Stigma linear, downy.

1. *Tuberosus.* *Wood Pease*, or *Heath Pease*. Root tuberous. Stem simple, erect, about a foot high. Leaves pinnated, smooth. Flowers purple, three or four in a cluster. Pods black, cylindrical, pendulous. May. In meadows, woods, &c. *Curt.* i. 53.
2. *Sylvaticus.* *English Wood Vetch*. Stems branched, hairy, decumbent, near two feet long. Leaves of about seven pair of pinnæ. Flowers red on the out-side, purple and white within, five or six in a cluster. July. P. In woods and hedges. *Lightf.* at p. 390.

**LATHYRUS.** Calyx campanulate, quinquefid, two upper segments shortest. Style plane, downy above. Pod very long.

\* *A single flower on each pedicle.*

1. *Aphaca.* *Yellow Vetchling*. Stalk angular, weak, branched, near two feet long. Leaves, or rather stipulæ, in pairs, triangular, bluish green, with a simple naked tendril between. Flowers yellow. Seeds about ten. June, July. A. In corn-fields, but rare. *Curt.* v. 51.
2. *Nissolia.* *Crimson Grass Vetch*. Stem erect. Leaves alternate, narrow, like grass, striated.

friated. Flowers small, red, on long pedicles from the axæ of the leaves. Pod three inches long, pendulous, hairy. Seeds about twelve, round, spotted. May. In corn-fields, &c.

\*\* *Two flowers on each pedicle.*

3. *Hirsutus. Rough-podded Chickling Vetch.* Stalk about two feet long. Leaves in pairs, lance-shaped, sharp-pointed. Tendrils branched, with two leaves. Flowers crimson, with yellow lines within, on long pedicles. Pod very hairy. Seeds rough. July. A. In corn-fields.

\*\*\* *Many flowers on each pedicle.*

4. *Latifolius. Broad-leaved Pease-everlasting.* Stalks weak, flat, three or four feet long. Leaves in pairs, oval, two inches broad. Claspers from between two leaves. Flowers pale purple, ten or twelve in a cluster. Pods three inches long. July. P. In woods and hedges. Ger. 1229. 1.
5. *Sylvestris. Narrow-leaved Pease-everlasting.* Differs from the last in the leaves being narrower, and the flowers red and white. June, July. P. Ger. 1229.
6. *Pratenfis. Tare-everlasting, or Yellow Vetchling.* Stems weak, quadrangular, about a foot high, with many branches. Leaves in pairs, elliptical, pointed at each end. Flowers yellow. Claspers small. Pods black, smooth. June, July. P. In woods, &c. Curt. iii. 44.
7. *Palustris*

7. *Palustris. Marsh Chickling Vetch.* Stems branched, edged, weak, about two feet long. Leaves pinnated. Flowers blue and red. Claspers with several leaves. June, July. In moist meadows.

VICIA. Calyx tubular, quinquefid; upper teeth shorter, but all of equal breadth. Stigma bearded transversely on the under side. Pod ending in a point.

\* *Flowers on long pedicles.*

1. *Sylvatica. Tufted Wood Vetch.* Stem angular, two feet long or more. Leaves pinnated; pinnæ about eight pair, oval. Stipulæ dentated. Flowers white streaked with blue, numerous, pendulous, in long spikes. July, Aug. P. In woods and hedges.
2. *Cracca. Tufted Vetch.* Stem branched, three or four feet long. Leaves pinnated; pinnæ generally ten or twelve pair, lance-shaped, downy. Stipulæ intire. Flowers purple, numerous, pendulous, in imbricated spikes. July, Aug. P. In woods and hedges. *Curt. v. 54.*

\*\* *Flowers in the axæ of the leaves, subsessile.*

3. *Sativa, Common Vetch, or Tare.* Stalks round, weak, branched, about two feet long. Pinnæ 5 or 7 pair, a little hairy, notched at the end. Stipulæ dentated. Flowers light and dark purple, on short pedicles, generally 2 together. Pods erect. Seeds black. Jun. A. *Ger. 1227. 1.*

4. *Lathy-*

4. *Lathyroides*. *Strangle Tare*, or *Wild Vetch*. Stem not much branched, scarce two feet high. Leaves pinnated; pinnæ 3 or 4 pair, notched at the ends; those below oval, the rest narrow. Flowers bright red, 2 together. Pods erect, smooth. Seeds about 9, brown. May, June. A. In dry, sandy pastures. *Ger.* 1227. 4.
5. *Lutea*. *Yellow Vetch*. Leaves sessile, oval, notched at the end. Flowers yellow. Pods single, sessile, hairy, reflex, thick. June, July. A. In meadows, &c. S. Brit.
6. *Sepium*. *Bush Vetch*. Stem weak, quadrangular, five or six feet long. Pinnæ seven or eight pair, oval, with the ends cut off. Flowers purple, generally four together, on short pedicles. Pods short, on pedicles. May. P. Among bushes. *Ger.* 1052. 1.
7. *Bithynica*. *Rough Vetch*. Peduncles solitary, erect. Small leaves quatern, ovali-lanceolate. Stipulæ notched. WITH.

ERVUM. Calyx almost as long as the corolla, in five segments, nearly equal. Stigma obtuse, not bearded.

1. *Tetraspermum*. *Smooth Tare*. Stems numerous, weak, about a foot long, angular. Pinnæ often ten pair, generally alternate. Flowers red, or purple, two or three together. Pods smooth, containing four seeds. June. A. In corn-fields, &c. *Curt.* i. 55.
2. *Hirsutum*. *Rough Tare*. Stem weak, very slender, scarce a foot long. Leaves pinnated.



pinnated. Flowers blue and white, five or six in a cluster, on pedicles. Pods short, hairy. Seeds round, whitish, generally two. June. A. In cornfields, &c. *Curt.* i. 54.

3. Solonienſe. *Spring Tare*. Stem about a foot long. Pinnæ three or four pair, obtuſe. Flowers purple, generally ſingle, on a pedicle, with a tendril. Foot-ftalks of the leaves ſharp-pointed. Pod ſlender. Seeds angular. April, May. In chalky paſtures, &c.

ORNITHOPUS. Calyx quinque-dentate. Pod taper, round, curved, jointed. Seed ſingle in each joint.

1. Perpuſillus. *Birdsfoot*. Stem weak, five or ſix inches high. Leaves pinnated; pinnæ ſmall, roundiſh, numerous, with an odd one at the end. Flowers yellow, purple and white, in a ſimple umbel. Pods reſemble a bird's foot. May, Aug. A. In paſtures, &c. *Ger.* 1241. 3. 4.

HIPPOCREPIS. Calyx quinque-dentate, the two upper denticles conjunct. Pod compreſſed, curved, with one ſuture deeply indented.

1. Comoſa. *Tuſted Horſeſhoe Vetch*. Stem weak, branched, ſcarce a foot long. Pinnæ oval, five or ſix pair, with an odd one. Flowers yellow, numerous, in ſimple umbels, terminal. Pods waved on the outer ſuture, pendulous. July. B. On chalk hills. *Ger.* 1056. 2. S. Brit.

HEDY-

HEDYSARUM. Carina transversely obtuse, so as to be almost triangular. Pod roundish. Seed single.

1. Onobrychis. *St. Foin, or Cock's-head.* Stems several, weak, half a yard long. Leaves pinnated, about seven pair, with an odd one; pinnæ oblong, pointed. Flowers red; wings of the corolla very short. Pods prickly, containing a single seed. July. P. In chalky pastures. *Ger.* 1243. 1. S. Brit.

ASTRAGALUS. Calyx quinque-dentate; lower teeth gradually less. Vexillum longest petal. Pod bilocular, gibbous, rounded.

1. Glycyphyllos. *Wild Liquorice, or Liquorice Vetch.* Stem branched, procumbent. Leaves large, pinnated; pinnæ five or six pair, with an odd one, oval. Flowers pale yellow, in thick bunches. Pods triangular, the upper side hollow. Seeds numerous, brown. June, July. P. *Ger.* 1233. 2.
2. Arenarius. *Purple Mountain Milkwort.* Stems about three inches long, procumbent. Leaves pinnated, downy. Flowers purple, in clusters, erect. June, July. On downs, heaths, &c.
3. Uralensis. *Silken Cock's-head.* Without Stem. Stalk erect longer than the leaves. Pods subulate, inflated, villous, erect. Leaves all radical, of ten or twelve pair of oval acute wings, downy. Flowers violet, eight or ten in a short thick spike. Jul. P. *Lightf.* xvi. p. 401.

TRIFO-

TRIFOLIUM. *Trefoil*. Vexillum reflex, and generally longer than the other petals. Pods very short, univalve, not bursting, deciduous. Leaves three together. Flowers generally in round heads.

\* *Meliloti*: pods naked, containing more than one seed.

1. *Officinalis*. *Common Melilot*. Stems erect, hollow. branched, three feet high. Leaves on foot-stalks, oblong, serrated. Flowers yellow, pendulous, on long spikes. Seeds two. June. Jul. P. In corn-fields, hedges, &c. *Ger.* 1205. 4.

2. *Ornithopoides*. *Bird's-foot Trefoil*. Stalks about five inches long, procumbent. Leaves serrated. Flowers pale purple. Pods, three on one foot-stalk, longer than the calyx, erect. Seeds eight. June. A. In sandy meadows, &c. *Curt.* ii. 53.

\*\* *Lotoidea*: pods covered; seeds four.

3. *Repens*. *White T. or Dutch Clover*. Stems creeping. Leaves with a white spot in the middle. Flowers white, on short pedicles, in a roundish head. May, Oct. P. In meadows, &c. every where. *Curt.* iii. 46.

\*\*\* *Lagopoda*: Calyx wooly.

4. *Subterraneum*. *Dwarf T.* Leaves heart-shaped, Flowers white, in wooly heads, five in each. Central involucre reflex, rigid; involving the fruit. Pods frequently under

under ground. May. A. In barren pastures near London, &c. *Curt.* ii. 54. S. Brit.

5. *Pratense*. *Purple*, or *Honeysuckle T.* or *Clover*. Stems diffuse, about eight inches long. Leaves on short foot-stalks, roundish, often marked with a white spot, and somewhat hairy. Flowers red, or purple, or yellowish white, in longish heads, between two membranous stipulæ; corollæ monopetalous. Lower tooth of the calyx very long. May, Sept. In meadows, &c. frequent. *Ger.* 1185. 1.
6. *Arvense*. *Hare's-foot T.* Stems erect, branched, downy. Leaves narrow, notched at the end, on very short foot stalks, and very soft. Flowers pale red, small, in oblong, downy, spikes. Calyx quinque-dentate, longer than the flower. June. Jul. A. In corn-fields, &c. *Ger.* 1192. 3.
7. *Scabrum*. *Oval-headed*, or *rough T.* Stems leaning, branched. Leaves on short foot-stalks, oval notched. Flowers white, very little longer than the calyx, in oval, rough, heads, sessile, lateral. May, June. A. On chalk hills. *H. ox.* ii. 13. 10.
8. *Glomeratum*. *Round-headed T.* Stem decumbent. Leaves small, broad, indented. Flowers pale red, in round heads, sessile, lateral; calyces striated, spreading, with intermediate, rigid segments. June. A. In meadows, &c. On sandy soil. *Curt.* iv. 51. S. Brit.
9. *Striatum*. *Knotted T.* Flowers small, pale, purple, in soft, oval, lateral, heads, sessile;

sessile; calyces striated, rounded. Seed large. Leaves somewhat hairy. June. A. In dry pastures.

10. *Alpestre*. *Long-leaved purple T.* Stem erect. Leaves lance-shaped, serrated. Flowers deep purple, in roundish, wooly heads, terminal. July. In mountainous pastures.

11. *Stellatum*. *Teasel headed T.* Stems diffuse. Leaves hairy, wedge-shaped. Flowers small, red, in round, wooly spikes; calyces spreading. June, July. P. In salt marshes, &c. S. Brit.

\*\*\*\* *Vesicaria: Calyces inflated.*

12. *Fragiferum*. *Strawberry T.* Stem creeping, about five inches long. Leaves, on long foot-stalks, oval, obtuse, bluish, serrated. Flowers reddish white, in roundish heads; calyces bidentate, reflex. Aug. P. In moist pastures. *Curt.* ii. 55. S. Brit.

\*\*\*\* *Lupulina: Vexillum reflex:*

13. *Agrarium*. *Hop T.* Stem hard, branched, generally erect. Leaves smooth, oval, or heart-shaped, bluish, on short foot-stalks. Flowers yellow, on naked pedicles, in imbricated heads, resembling hops. June. In meadows, &c. *Curt.* iii. 45.

14. *Procumbens*. *Procumbent T.* Stem procumbent, near a foot long. Leaves small, heart-shaped. Flowers small, yellow, in oval, imbricated spikes, or heads. May, Aug. In meadows, &c. *Curt.* v. 53.

15. *Filiforme*. *Small T.* Stem very slender, procumbent, about 4 inches long. Leaves notched, striated, somewhat heart-shaped. Flowers small, yellow; calyces on short pedicles. May, June. A. In sandy pastures.
16. *Ochroleucum*. *Brimston T.* Spikes villous. Stem erect, downy. Foliolæ of the lower leaves inversely cordate. Spikes globular. Corolla of one petal. Lower tooth of the calyx very long, straight. Stem declining. Leaves wooly. HUDS. WITH. June. P. S. Brit.
17. *Stellatum*. *Star T.* Spikes hairy, oval; calyx spread. Stem diffuse. Small leaves obcordate. Calyx as long as the corolla, divided to the base. Flower pale purple. Pastures on the coast. Jun. P. S. Brit.

LOTUS. Calyx cylindrical, quinquifid; teeth sharp, equal. Wings of the corolla broad, connivent upwards. Pod cylindrical, stiff, longer than the calyx.

1. *Corniculata*. *Bird's-foot Trefoil*. Stem branched, decumbent. Leaves oblong, pointed, three on each foot-stalk, with two at the base. Flowers yellow, in clusters, on pedicles, from the axæ of the leaves. Seeds numerous. June, Aug. P. In meadows, hedges, &c. *Curt.* ii. 56.

MEDICAGO. Calyx cylindrical, bellying a little, quinquifid. Wings of the corolla connivent under the carina, to which they are fixed by a short appendix. Carina bifid, oblong, obtuse, deflex.

flex. Pod spiral, compressed, containing many seeds.

1. *Sativa. Lucern.* Stem erect, branched, about two feet high. Leaves numerous, serrated, three on each foot-stalk. Flowers purple, in clusters, on pedicles. June, July. P. In meadows, &c. *Ger.* 1189.  
2. S. Brit.
2. *Falcata. Yellow Medick.* Stems numerous, branched, prostrate, somewhat woody. Leaves yellowish, narrow, three on each foot-stalk. Flowers yellow in clusters, terminal. Pods curved. July. P. In high roads, &c. *Ger.* 1191. 8. S. Brit.
3. *Lupulina. Melilot Trefoil.* Stem slender, procumbent, above a foot long. Leaves small, obtuse. Flowers yellow, in oval spikes. Pods reniform. May, Aug. In corn-fields, &c. *Curt.* ii. 57.
4. *Arabica. Heart Trefoil, or Clover.* Stem slender, diffuse, eight or ten inches long. Leaves heart-shaped, on foot-stalks. Flowers yellow, on pedicles, in clusters. Pods prickly, twisted. May. In meadows, corn-fields, &c. *Curt.* iii. 47. S. Brit.



## C L A S S XVIII.

## P O L Y A D E L P H I A.

Many sets of united Stamina.

## P O L Y A N D R I A.

Many Stamina in each set.

**HYPERICUM.** Calyx quinquepartite; segments oval, concave, permanent. Petals five, regular, obtuse, spreading. Filaments in five sets. Pistilla three.

1. *Androsæmum.* *Tutsan*, or *Park-Leaves*. Stems numerous, hard, firm, two-edged. Leaves opposite, oval, large. Flowers large, yellow, in clusters, terminal. Pericarpium resembles a berry. The leaves generally grow red in autumn. July. P. In woods and moist hedges frequent. *Curt.* iii. 48.
2. *Quadrangulum.* *St. Peter's Wort*. Stem quadrangular, herbaceous, branched, about a foot high. Leaves opposite, sessile, oval, obtuse. Flowers yellow, on pedicles. July. P. In moist hedges. *Curt.* iv. 52.
3. *Perforatum.* *St. John's Wort*. Stem two-edged, about two feet high, branched towards the top. Leaves elliptical, opposite, obtuse, with pellucid spots. Flowers

Flowers yellow, in clusters, terminal, yielding a red juice when bruised. July. P. In hedges, &c. *Curt.* i. 57.

4. Humifusum. *Trailing St. John's Wort.* Stem procumbent, edged, about six inches long. Leaves opposite, smooth, not punctured. Flowers yellow, axillary and terminal. July. P. In meadows, &c. *Curt.* iii. 50.
5. Montanum. *Imperforate St. John's Wort.* Stem single, simple, near two feet high, erect. Leaves large, broad, not punctured, smooth. Flowers yellow, large, on pedicles, terminal; calyces serrato-glandular. Jul. P. In woods not frequent. *Fl. dan.* 173.
6. Hirsutum. *Hairy St. John's Wort.* Stem round, erect. Leaves oval, hairy. Flowers yellow; calyces serrato-glandular. July. In hedges, &c. *Pet.* 60. 10.
7. Pulchrum. *Upright St. John's Wort.* Stem round, naked, erect. Leaves heart-shaped, smooth, opposite, conjugate. Flowers yellow; calyces serrato-glandular. July. In woods, hedges, &c. *Curt. pl.* 56.
8. Elodes. *Marsh St. Peter's Wort.* Stem creeping, near a foot long, round. Leaves opposite, roundish, woolly. Flowers yellow, terminal. July. P. On bogs, &c. *Pet.* 60. 12.

## C L A S S   XIX.

## S Y N G E N E S I A.

Flowers compound, except the last order : receptacle and calyx common to many sessile, monopetalous florets : antheræ five in each floret, collected in a cylinder : germen monospermous, under each floret.

## I. POLYGAMIA ÆQUALIS.

Florets all hermaphrodite.

\* *Florets ligulate.*

TRAGOPOGON. Common calyx of eight leaves united at the base. Receptacle naked. Down of the seed feathered, with about thirty radii.

1. Pratense. *Yellow Goat's-beard.* Root conical, anular, esculent. Stem erect, branched, grassy, about two feet high. Leaves long, carinated, narrow, intire, sessile, grassy. Flowers yellow, large, single, terminal ; calyx equal with the florets. June. Shuts at noon. In meadows, &c. *Ger.* 735. 2.
2. Porrifolium. *Purple Goat's-beard.* Root long, thick, esculent. Stem jointed, about two

two feet high. Leaves long, pointed, bluish. Flowers large, purple, single, terminal; calyx longer than the radius of the flower. May. B. In meadows, &c. In gardens called *falsafie*. *Ger.* 735. 1. S. Brit.

PICRIS. Calyx double; the interior imbricated, exterior of five leaves. Receptacle naked. Down of the seed feathered. Seed transversely furrowed.

1. Echioides. *Ox-tongue*. Stem branched, about eighteen inches high. Leaves long, narrow, rough. Flowers yellow, in leafy heads; calyx surrounded by a large involucre. July, August. A. *Curt.* iii. 51. S. Brit.

2. Hieracioides. *Yellow Succory*, or *Rough Hawk-wood*. Stem a foot and a half high, branched, hairy. Leaves embrace the stem, hairy, almost oval; those from the root indented. Flowers large, yellow, on long naked pedicles; calyx black, with yellow hairs, imbricated. Seeds curved. July. A. In corn-fields. *Ger.* 298. 7. S. Brit.

SONCHUS. *Sow Thistle*. Calyx imbricated, bellying, conical; scales narrow, numerous, unequal. Receptacle naked. Down of the seed simple, sessile, very soft. Seed oval, pointed.

1. Palustris. *Marsh S. T.* Stem erect, six to ten feet high, branched and hairy towards the top. Leaves firm, broad, half-pinnated, serrated, sharp-pointed,

the lower ones sagitate at the base. Flowers deep yellow, large dispersed on the tops of the branches; calyx rough. Jul. Aug. P. In marshes. *Curt.* v. 59. S. Brit.

2. *Arvensis.* *Corn S. T.* Leaves alternate, runcinate, cordate at the base. Root creeping. Stem half as high as the last, and flower larger. In corn-fields. Aug. P. *Curt.* iv. 53.
3. *Oleraceus.* *Common. S. T.* Stem firm, erect, much branched. Leaves broad, embracing the stem, generally deeply sinuated, smooth or prickly at the edges. Flowers pale yellow, numerous, in a kind of umbel, terminal; calyx smooth. June, Sept. In corn-fields, roads, &c. *Curt.* ii. 58.
4. *Alpinus.* *Blue-flowered S. T.* Stem erect, purplish, branched, or simple, from three to six feet high. Leaves large, smooth, sinuated; the extreme segment large, triangular. Flowers blue, on hairy viscid pedicles, in long spikes; calyx brown. *Wallis Northumb. Ger.* 294. 7. S. Brit.

LACTUCA. *Lettuce.* Calyx imbricated, cylindrical. Receptacle naked. Down simple, connected to the seed by a stem, or style.

1. *Scariola.* *Mild-scented L.* Leaves vertical; carina prickly. Lower leaves runcinate. Flower smaller than that of *Virosa*, and foot-stalks of the down shorter. Aug. B. WITH. S. Brit.

2. *Virosa.*

2. *Virosa*. *Strong-scented L.* Stem firm, hollow, five feet high. Leaves large, indented, with a spinous middle rib. Flowers small, yellow, numerous, terminal. Seed black. Juice smells like opium. July, Aug. B. In hedges, &c. *Ger.* 309. 1.
3. *Saligna*. *Least wild Lettuce*. Stem about a foot high. Leaves long, narrow, with prickly ridges; those below pinnatifid. Flowers yellow, very small; calyx tubular. Aug. On the banks of ditches. *Jacq.* iii. 250. S. Brit.

**PRENANTHES.** Calyx slender, double, cylindrical, of few scales, rarely more than five. Receptacle naked. Down of the seed simple, on a short style. Florets in a single series.

1. *Muralis*. *Ivy-leaved wild Lettuce*. Stem erect, about two feet high. Leaves deeply cut at the base; the extreme segment large, triangular, trilobed. Flowers small, yellow, on naked pedicles; floccules five. Jul. On walls, and in woods, &c. *Curt.* v. 58.

**LEONTODON.** Calyx imbricated, oblong; interior scales linear, parallel, equal; exterior few, generally reflex. Down of the seed on a pedicle, and feathered. Receptacle naked. Perennial.

1. *Taraxacum*. *Dandelion*. Stalk erect, simple, hollow, eight or ten inches high. Leaves in a circle, on the ground, deeply indented, soft; segments triangular, the extreme one largest. Flower yellow, large,

large, single, terminate; calyx reflex beneath. The whole plant full of bitter milk. April, Sept. Meadows, &c. common. *Curt.* i. 58.

2. *Hispidum*. *Rough Dandelion*. Calyx intirely erect, rough, brown. Leaves rough; otherwise like the last. May, Jul. *Curt.* v. 56.
3. *Autumnale*. *Yellow Devil's-bit*. Stem branched, leaning, about eight inches high. Leaves smooth, lance-shaped, intire, dentated. Flowers single, yellow, on scaly pedicles; scales of the calyx smooth, erect. Root bitten off. Aug. P. In meadows, &c. *Ger.* 296. 2.

**HIERACIUM.** *Hawkweed*. Calyx imbricated, oval; scales erect, unequal. Receptacle naked. Down of the seed simple, sessile. Seed short, almost cylindrical, or conic, furrowed.

\* *Stalk naked, bearing a single flower.*

1. *Alpinum*. *Mountain Hawkweed*. Stalk 6 or 8 inches high, naked, somewhat scaly. Leaves oblong, dentated, hairy. Flower single, large; calyx black, hairy. In Wales. July. P. *Lightf.* xviii. p. 434.
2. *Taraxaci*. *Devil's-bit H.* Leaves lanceolate, dentate, smooth. Stalk almost naked, with one flower. Calyx hairy. Leaves of *Leont. autumnale*. Stalk and flower of *H. alpinum*. Down sessile. July. P. *Hedynois* of Hudf.
3. *Pilosella*. *Mouse-ear H.* Stalks creeping; that which bears the flower erect, beset with black



black hairs, and swelling towards the top. Leaves oval, intire, downy white beneath. Flower pale yellow; calyx cylindrical, rough, black. May. A. In meadows, &c. *Curt.* iv. 54.

\* \* *Stalk naked, bearing several flowers.*

4. *Dubium*. *Creeping H.* Stalks simple, about a foot long, creeping; that which bears the flowers erect. Leaves green on both sides, beset with long hairs, lance-shaped, slightly serrated. Flowers 4 or 5, small, pale yellow. July, Aug. P. Westmoreland, &c. S. Brit.

5. *Auricula*. *Narrow-leaved H.* Leaves entire, lanceolate. Suckers creeping, leafy. Stalk erect, 5 or 6 inches. Flowers yellow, in a panicle. Very like the last. July. P. S. Brit.

\* \* \* *Stem leafy.*

6. *Murorum*. *French, or golden Lungwort.* Stem branched, about 2 feet long, hairy, with 1 or 2 narrow leaves. Radical leaves oval, hairy, dentated. Flowers yellow, in a kind of umbel. July. P. On walls, in woods, &c. *Ger.* 304. 1.

7. *Paludosum*. *Marsh H.* Leaves embrace the stem, gradually tapering to a point, smooth, minutely dentated. Flowers large, yellow, in a panicle, terminal; calyx black, rough. July. B. In moist meadows. *Ger.* 300. 11.

8. *Sabaudum*. *Broad-leaved, bushy H.* Stem firm, erect, about a yard high, purplish. Leaves elliptical, pointed, firm, hairy, dentated. Flowers yellow, numerous, from the axæ of the upper leaves. July, Aug.

Aug. P. In woods and hedges, &c.  
*Fl. dan.* 872.

9. *Umbellatum*. *Narrow-leaved bushy H.* Stem firm, erect, 3 or 4 feet high. Leaves numerous, narrow, sharply dentated, or intire. Flowers yellow, on long pedicles, in umbels, terminal; calyx livid, smooth. Seed purple. July, Aug. P. In woods and hedges. *Ger.* 298. 5.

CREPIS. *Hawkbeard*. Calyx double; the exterior expanded, very short, deciduous; interior simple. Down of the seed feathered, and raised on a long pedicle.

1. *Fœtida*. *Stinking H.* Stem branched, about a foot high. Leaves pinnated; pinnæ alternately less, sharp-pointed. Flowers yellow, purplish on the outside, drooping before they blow. Smells like bitter almonds. June, July. B. In pastures, but rare. *Ger.* 279. S. Brit.
2. *Tectorum*. *Smooth Succory H.* Stem hard, firm, striated, much branched, a foot high. Leaves smooth, sessile; those from the root pinnato-dentate; the rest lance-shaped, intire, or slightly dentate. Flowers yellow, very small; calyx somewhat hairy, clammy. Seed very long. June. A. In pastures, on walls, &c. every where. *Curt.* v. 55.
3. *Biennis*. *Rough Succory H.* Stem thick, angular, rough, 3 or 4 feet high, branched, fragile. Leaves deeply sinuated, rough beneath. Flowers yellow, not large, on long pedicles, from the axæ of the leaves; calyx furrowed, beset with soft spines. July,

July, Aug. B. In meadows, hedges,  
&c. *Park.* 793. S. Brit.

**HYOSERIS.** Receptacle naked. Calyx  
of 10 leaves, imbricated; scales erect,  
equal. Down of the seed simple, capil-  
lary, or obsolete.

1. *Minima.* *Small Swine's Succory.* Stem naked,  
divided, about 6 inches high. Leaves  
narrow, intire. Flowers yellow, on fork-  
ed pedicles enlarging towards the top.  
May, June. In meadows and corn-fields  
about London. June. A. *Ger.* 218. 8.

**HYPOCHÆRIS.** *Cat's ear.* Receptacle  
scaly. Calyx roundish, imbricated, bel-  
lying at the base. Down of the seed  
raised on a pedicle, and feathered.

1. *Maculata.* *Spotted C.* Stem generally simple,  
almost naked, near 2 feet high. Leaves  
hairy, oval, dentated, often with brown  
spots. Flower yellow, large, single, ge-  
nerally closed; calyx black, hairy, of  
large scales. July. P. On high ground.  
*Fl. dan.* 149. S. Brit.
2. *Glabra.* *Smooth C.* Stem branched, smooth,  
naked. Leaves sinuated, dentated,  
smooth. Flower yellow, small; calyx  
oblong; down partly sessile. July. In  
high pastures: about Bristol frequent.
3. *Radicata.* *Long-rooted C.* Stem naked, branch-  
ed, near two feet high. Leaves sinuated,  
dentated, rough; denticles rectangular.  
Flower yellow, full, purplish on the out-  
side; pedicles thickest near the flower;  
calyx

calyx a little hairy. May, June. P. In meadows, &c. *Curt.* iii. 52.

**LAPSANA.** Receptacle naked. Calyx imbricated, double, angular, with a few additional scales at the base; interior scales channelled. Seeds naked, oblong, striated.

1. **Communis.** *Nipplewort.* Stem erect, from 2 to 5 feet high, branched at the top. Bottom leaves on long footstalks, deeply sinuated near the base; upper-leaves lance-shaped, serrated. Flowers small, yellow, in umbels, terminal. June, Jul. A. In hedges, &c. frequent. *Curt.* i. 59.

**CICHORIUM.** Receptacle scaly. Calyx double; the interior of 8 scales forming a cylinder; exterior of 5. Seeds without down, or very little.

1. **Intybus.** *Wild Succory.* Stem about 2 feet high, simple, or sometimes branched. Leaves sinuated, dentated. Flowers blue, sessile, lateral. Scales of the exterior calyx fringed. July, August. B. On waste ground frequent. *Curt.* iv. 56. S. Brit.

\* \* *Florets tubular, equal, collected in a roundish head.*

**ARCTIUM.** Calyx globose, imbricated; scales reflex, hooked.

1. **Lappa.** *Burdock.* Leaves heart-shaped, not prickly, on foot-stalks. July, Aug. B. In high roads, waste ground, &c. *Curt.* iv. 55.

**SERRATULA.** *Saw-wort.* Calyx cylindrical, imbricated; scales pointed, but not hooked nor spinous.

1. **Tinctoria.**

1. *Tinctoria. Saw-wort.* Stem erect slender, branched at the top, 3 feet high. Leaves smooth, pinnatifid, serrated. Flowers purple, in umbels, terminal. Down of the seed glossy, with a brown or gold tinge. July. P. In woods, meadows, &c. *Ger.* 377. 3.
2. *Alpina. Mountain Saw-wort.* Root and stem woody; the latter from 1 to 2 feet high. Leaves numerous, triangular, long, pointed, substantial, dark green above, white beneath, serrated, with round intervals between the teeth, on foot-stalks. Flowers purple. Scales of the calyx very short, downy. Aug. P. On high mountains in Wales, and in the North of England. *Lightf.* xix. p. 428.
3. *Arvensis. Corn Saw-wort, or Way Thistle.* Stem generally erect, branched, 2 or 3 feet high. Leaves sinuated, serrated, spinous; those above almost intire. Flowers pale purple; down very long. July. In high roads and corn-fields frequent. *Ger.* 1173. 4.

CARDUUS. *Thistle.* Calyx oval, imbricated; scales numerous, spinous, straight. Receptacle hairy. Down of the seed sessile, long.

\* *Leaves decurrent.*

1. *Lanceolatus. Spear T.* Stem branched, 2 feet high. Leaves pinnatifid, rough, spinous, segments divaricated. Flowers purple; heads sessile, terminal. Calyx hairy; spinous. July. A. In high roads frequent. *Ger.* 1174. 6.

2. *Nutans.*

2. Nutans. *Musk T.* Stem branched, 2 or 3 feet high, spinous, winged and downy. Leaves firm, glossy, deeply sinuated, waved, spinous, with a white rib. Flower large, purple, generally single, terminal, pendulous. Spines of the calyx yellow, stiff. Seed brown, glossy. Smells like musk. July. P. In dry pastures, &c. *Fl. dan.* 675.
3. Acanthoides. *Wetted T.* Stem 2 or 3 feet high, with downy spinous wings. Leaves decurrent, pinnatifid, waved, spinous, downy beneath. Flowers pale red, small, sessile. Spines of the calyx yellow. June, July. A. In roads, ditch-banks, &c. *Pet.* 21. 2.
4. Crispus. *Thistle upon T.* Stem brittle, branched, erect, 3 feet high, with long, narrow, spinous wings. Leaves sinuated, fringed, spinous, downy on the under side. Flowers small, aggregated, terminal, purple. Spines of the calyx soft. June. A. Roads, ditches, &c. *Ger.* 1173. 1.
5. Palustris. *Marsh T.* Stem 5 or 6 feet high. Leaves narrow, dentated, spinous. Flowers purple, in bunches, erect, terminal. Calyx smooth. July. P. In fenny ground. *Pet.* 21. 4.

\* \* *Leaves sessile.*

6. Pratenfis. *Gentle T.* Leaves sessile, half-sheathing, lanceolate, fringed, a little notched, beneath woolly. Stem 1 to 2 feet. Flower purple, terminal, generally solitary. Jul. P. *Ger.* 1183. 3. *Cirsium angl.* of Ray. *Card heterophyllum* of Lightf.

7. Marianus.



7. Marianus. *Milk Thistle*, or *Lady's Thistle*. Stem five feet high, firm, branched. Leaves very large, pinnatifid, spinous, waved, indented, streaked with white veins. Flowers large, purple; calyx spinous. July, in ditches, &c. *Curt.* iii. 54.
8. Eriophorus. *Woolly-headed Thistle*. Stem about 6 feet high, firm, branched. Leaves a foot long, rough, downy beneath, doubly pinnatifid; segments alternately erect, spinous. Flowers purple, in large round heads; scales of the calyx erect, covered with silky down, and terminated by a yellow spine. July. P. In mountainous pastures, &c. *Ger.* 1152. 6.
9. Helenioides. *Melancholy Thistle*. Stem erect, firm, 5 or 6 feet high, furrowed, downy. Leaves numerous, lance-shaped, white beneath, dentated, fringed with soft spines. Flower single, large, purple, terminal. June, July. P. In Wales and the North of England. *Mill.* 94.
10. Acaulis. *Dwarf Carlina Thistle*. Stem scarce an inch long. Leaves spread on the ground, large, deeply divided, waved, spinous. Flower purple, very large, closing at night, and in rainy weather. Root woody, branched, black. July. P. In dry pastures. *Ger.* 1158. 3.

ONOPORDUM. Calyx imbricated, bellying; scales numerous, spinous, prominent, downy. Receptacle naked. Down of the seed capillary.

1. Acanthidum. *Cotton Thistle*. Stem 5 or 6 feet high, branched, winged, with dentated



membranes. Leaves sessile, oval-oblong, variously sinuated; spines rigid, sharp. Flowers purple, large, terminal; spines on the lower part of the calyx, reflex. Jul. P. On waste ground, ditches, &c. *Curt.* v. 57.

**CARLINA.** Calyx imbricated, radiate; interior scales long, coloured. Down of the seed branched, feathered.

1. *Vulgaris.* *Wild Carline Thistle.* Stem erect, branched, purple, from 3 inches to a foot and half high. Leaves sessile, strong, downy, dentated, with two yellow spines to each denticle. Flowers purple, in a kind of umbel, terminal. The inner scales of the calyx yellowish. June: B. In dry pastures, &c. *Ger.* 1159. 1.

\*\*\* *Flowers discoide. Florets tubular.*

**BIDENS.** Calyx imbricated. Corollulæ quinquefid. Seed with two long, rough, aristæ. Sometimes there are a few ligulate radiant floscules. Receptacle scaly.

1. *Tripartita.* *Trifid Water-Hemp Agrimony.* Stem much branched, 2 feet high. Leaves 3 or 5 on each foot-stalk, deeply serrated. Flowers yellow, terminal. Seeds erect. July, Aug. A. In fens, &c. *Curt.* iv. 57.
2. *Cernua.* *Whole-leaved Water-Hemp Agrimony.* Differs from the last in the leaves being sessile, single, and the flower drooping, and larger. *Curt.* iii. 55.

**EUPATORIUM.** Calyx imbricated; scales few, erect. Florets quinquefid, 5  
in

in each calyx. Style very long, deeply divided. Receptacle naked. Down of the seed feathered.

1. *Canabinum. Hemp Agrimony.* Stem hairy, quadrangular, from 3 to 7 feet high. Leaves ferrated, lance-shaped, 3 on each foot-stalk. Flowers pale red, small, in large flat-topped clusters, terminal. June, Sept. P. Near rivers, &c. *Ger.* 453. 2.

**ATHANASIA.** Calyx imbricated, oval; scales compact. Receptacle scaly. Florets uniform, numerous.

1. *Maritima. Sea Cudweed.* Stems numerous, white, a foot high. Leaves lance-shaped, intire, obtuse, notched downy. Flowers yellow and white, in clusters, terminal. June, July. P. On the coast. *Ger.* 640. 3. S. Brit.

## II. POLYGAMIA SUPERFLUA.

Florets of the disk hermaphrodite; those of the radius female.

\* *Discoide.*

**TANACETUM.** Calyx imbricated, hemispherical; scales acute. Radii obsolete, trifid. Receptacle convex, naked. Seed naked.

1. *Vulgare. Common Tansy.* Stem erect, branched, 3 or 4 feet high. Leaves bipinnated, ferrated. Flowers yellow, in naked plane clusters, terminal. In mountainous pastures in the North. *Ger.* 650. 1.

ARTEMESIA. Calyx imbricated; scales rounded, connivent. Seeds naked. Radix o. Receptacle plane, naked, or downy.

\* *Procumbent before flowering.*

1. *Campestris*. *Field Southernwood*. Stems several, branched, woody, near 2 feet high. Leaves grey-green, multifid, on long foot-stalks. Flowers small, brown, in short spikes, on straight, lateral twigs. Aug. P. In mountainous pastures, &c. *Ger.* 1106. 5. *S. Brit.*
2. *Maritima*. *Sea Wormwood*. Stem branched, about 2 feet high. Leaves multipartite, downy. Flowers brown, in drooping clusters, terminal; female floscules ternate. Aug. P. On the coast. *Ger.* 1099. 1.

\*\* *Erect: leaves composite.*

3. *Abinthium*. *Common Wormwood*. Stem hard, branched, from 1 to 3 feet high. Leaves dark green above, white, downy on the under side, multifid, composite. Flowers single, on pedicles, in unilateral spikes, pendulous. Receptacle woolly. Aug. P. On waste ground. *Ger.* 1096. 1.
4. *Vulgaris*. *Mugwort*. Stem firm, erect, 3 or 4 feet high, purple. Leaves pinnatifid; segments long, pointed, cut in the edges, white, downy on the under side. Flowers purplish, erect, oval, sessile, in long spikes, on the tops of the branches. Aug. P. In hedges, &c. *Ger.* 1103. 1.

\*\*\* *Leaves*



denſe. July, Aug. A. *Ger.* 643. 13.  
WITH. S. Brit.

5. *Supinum*. *Dwarf C.* Stem ſimple, procumbent, 3 inches, woolly. Leaves linear. Flowers 3 or 4 in a looſe ſpike. P. *Lightf.* xx. p. 470. N. Brit. On mountains.

CONYZA. Calyx imbricated, oblong; ſcales acute, reflex. Receptacle naked. Down ſimple. Female floſcules trifid, marginal.

1. *Squarroſa*. *Plowman's Spikenard*. Stem firm, erect, branched, 2 feet high. Leaves launce-shaped, dark-green, wrinkled, downy beneath. Flowers purpliſh dead yellow, in looſe clusters, terminal. Scales of the calyx purple-pointed. Female flowers numerous. July, Aug. B. In dry paſtures, &c. *Ger.* 792.

*Radiate.*

ERIGERON. Calyx oblong, imbricated; ſcales long, narrow, erect. Female florets ligulate, erect, very narrow. Receptacle naked. Down of the ſeed ſimple, long.

1. *Canadenſe*. *Canada Fleabane*. Stem erect, hairy, from 2 to 4 feet high, much branched. Leaves long, narrow, intire, pale green. Ligulate florets numerous, reddiſh white; tubular yellow. Flowers ſeveral on each ſhort pedicle, from the axæ of the leaves, ſurrounding erect branches, in long looſe ſpikes. Aug. A. In waſte ground about London frequent. *Pet.* 16. 12.

2. *Acre*.

2. Acre. *Blue-flowered Fleabane*. Stem from 3 inches to 2 feet high, rough, purplish. Leaves long, narrow, waved, a little hairy. Flowers on alternate pedicles, single. Disk yellow; florets of the radius blue, about 40 in number. July, Aug. *Curt. i. 60.*

**TUSSILAGO.** Calyx cylindrical; scales equal, 15 or 20, equal with the disk. Receptacle naked, down simple. Corolla various.

1. Farfara. *Common Coltsfoot*. Stalk scaly, about 8 inches high, supporting a single, yellow, radiate flower. Leaves heart-shaped, angular, dentated, radical, appearing after the flower. March, P. In moist ground. *Curt. ii. 60.*
2. Hybrida. *Long-stalked Butter-bur*. Stalk 2 or 3 feet high. Leaves very large. Flowers reddish, on very long branched pedicles, pendulous, in long loose spikes. Scales of the calyx in a double series, downy. Female florets numerous, small, tubular; pistillum long, horned; hermaphrodites 1 or 2. Apr. P. In moist meadows, &c.
3. Patasites. *Common Butter-bur*. Stalks simple, purple, scaly, about a foot high, rising before the leaves. Florets pale red, tubular, all hermaphrodite, regular, from 10 to 20 in number. Scales of the calyx in 4 series, reddish. Leaves, on long foot-stalks, heart-shaped, dentated, somewhat downy beneath, in May. Flowers in oval spikes. March, April. In moist meadows, &c. *Curt. ii. 59.*



SENECIO. *Groundfel.* Calyx cylindrical, double; scales equal and contiguous, so as to seem intire; those at the base few; apices dead. Receptacle naked. Floscules of the disk tubular; those of the radius, if there be any, ligulate.

1. *Vulgaris.* *Common G.* Stem erect, thick, much branched, a foot high. Leaves sessile, smooth, sinuated; segments short, broad, minutely serrated. Flowers small, yellow, numerous, terminal, without radii. May. In cultivated ground, &c. every where. *Curt. i. 61.*

• *Radii revolute.*

2. *Viscosus.* *Cotton G. or Stinking Groundfel.* Stem erect, branched at the top, 2 feet high. Leaves sessile, pinnatifid, viscid, downy. Flowers yellow, in umbels, terminal; radii very short; scales of the calyx converge at the top. June. A. On sandy ground frequent. *Ger. 278. 2.*
3. *Sylvaticus?* *Mountain G.* Stem erect, about a foot high. Leaves pinnatifid, dentated, somewhat hairy. Flowers small, yellow, on separate pedicles, in clusters, terminal. July. A. In woods, heaths, &c. frequent. *Ger. 278. 2.*

\*\* *Radii straight: leaves pinnatifid.*

4. *Erucifolius.* *Hoary perennial Ragwort.* Stem erect, downy, white, 2 feet high. Segments of the leaves narrow, divided at the ends, downy beneath. Flowers yellow, in clusters, terminal. July. P. In woods, hedges, &c. *Curt. v. 64. S. Br.*

5. *Jaco-*



5. *Jacobæa*. *Common R.* Stem erect, thick, branched towards the top, three feet high. Leaves pinnatifid, or regularly dentated. Flowers yellow, on branched pedicles, in large clusters, terminal. July. P. In pastures frequent. *Ger.* 280. 1.

*Aquaticus*. Hups. A variety from situation.

\*\*\* *Radii straight: leaves not divided.*

6. *Paludosus*. *Marsh R.* Stem erect, branched towards the top, four or five feet high. Leaves long, narrow, serrated, downy beneath. Flowers yellow, large. Aug. P. In fens, ditches, &c. *Ger.* 483. 6. S. Brit.

7. *Saracenicus*. *Broad-leaved R.* Stems erect, simple, four or five feet high. Leaves numerous, firm, elliptical, dark green, serrated. Flowers several on each pedicle, erect, yellow, in clusters, terminal. July, Aug. P. In moist pastures, &c. *Ger.* 429. S. Brit.

ASTER. Calyx imbricated; lower scales reflex. Radii more than ten, tridentate, Receptacle naked. Down simple.

1. *Tripolium*. *Sea Starwort*. Stem firm, two or three feet high, branched at the top. Leaves lance-shaped, thick, intire, smooth. Flowers large, in clusters, terminal; disk yellow, radius blue. Aug. P. On the coast. *Ger.* 413. 1.

SOLIDAGO. Calyx imbricated; scales curved inward. Radii about five. Receptacle naked. Down simple. Flowers loose, in spikes parallel to the stem.

1. Vir-

1. *Virgaurea*. *Golden Rod*. Stems two or three feet high, branched. Leaves ovato-lance-shaped, serrated on foot-stalks. Flowers yellow, numerous, in spikes from the axæ of the leaves, erect, alternate; radii trinervate, contracted at the apex. July. P. In woods, hedges, &c. *Ger.* 430. 2.

*Cambrica*. HUDS. A variety growing on rocks.

INULA. Calyx imbricated; scales loose, spreading, of equal length. Radii numerous, linear, intire. Antheræ with ten bristles at the base. Down simple.

1. *Helenium*. *Elecampane*. Root very large. Stem five or six feet high, firm, erect. Leaves numerous, very large, embracing the stem, oval, downy beneath, serrated. Flowers large, yellowish-green; scales of the calyx very broad. July, Aug. P. In moist meadows, &c. *Ger.* 793.
2. *Dysenterica*. *Middle Fleabane*. Stem hairy, about two feet high. Leaves cordato-oblong, embracing the stem, downy, pointed, waved at the edge. Flowers yellow, numerous, single, on pedicles; scales of the calyx very numerous, hairy. Radii tridentate. Smell and taste acrid. Aug. P. Banks of rivers, ditches, &c. *Curt.* iii. 56. *S. Brit.*
3. *Pulicaria*. *Small Fleabane*. Stem much branched, purple, near two feet long, often prostrate. Leaves waved, embracing the stem, foetid. Flowers yellowish, terminal and lateral, often without radii.

dii. Calyx very hairy. Aug. Sept. A.  
Curt. iii. 57. In stagnant water. S. Br.

4. Crithmoides. *Golden Sampire*. Stem firm, erect. Leaves linear, thick, three-pointed. Flower single, yellow, terminal. Aug. In meadows near the coast. Ger. 533. 3.

CINERARIA. Calyx simple, of many equal leaves. Radii ligulate, equal in number with the leaves of the calyx. Receptacle naked. Down simple.

1. Palustris. *Marsh Fleabane*. Stem erect, branched, woolly. Leaves sessile, covering the stem, sinuated, serrated, lance-shaped. Flowers yellow, numerous, terminal. Aug. P. In fens, &c. Ger. 483. 5. S. Brit.
2. Alpina. *Mountain Ragwort*. Stem erect, branched at the top, a foot high. Leaves intire, woolly, sessile, lance-shaped. Flowers yellow, large, in umbels, terminal. June. P. In mountainous pastures, &c. Ger. 280. 2.

BELLIS. Calyx simple, hemispherical; scales in a double series, equal. Receptacle conic, naked. Down o. Radii numerous, intire. Seed oval.

1. Perennis. *Common Daisy*. Stalks naked, three or four inches high. Leaves oblong, obtuse, notched, spread upon the ground. Flowers single, yellow and white. March, Oct. In meadows, &c. every where. Curt. i. 62.

CHRYSA-

**CHRYSANTHEMUM.** Receptacle naked. Down o. Calyx hemispherical, imbricated; scales compact; the interior ones gradually larger, and those in the margin membranous. Radii more than twelve, tridentate.

1. *Leucanthemum.* *Great Daisy.* Stem erect, about a foot and a half high. Leaves embrace the stem, oblong, serrated. Flowers like the common daisy, but larger, one at the extremity of each branch. May. P. In pastures, &c. *Curt.* v. 62.
2. *Segetum.* *Corn Marygold.* Stem about two feet high, branched. Leaves embrace the stem, numerous, deeply laciniated. Flowers yellow, large, terminal. June, July. A. In corn-fields. *Ger.* 743. 1.
3. *Inodorum.* *Chamomile Daisy.* Stem much branched, smooth, striated, about ten or twelve inches. Leaves pinnatifid, multifid. Flowers large, terminal. External florets reflex. Jul. Sept. A. *Fl. dan.* 696.

**MATRICARIA.** Calyx hemispherical, imbricated; scales linear, sub-equal, margin solid. Down o. Receptacle naked. Radii tridentate.

1. *Parthenium.* *Feverfew.* Stem branched, erect, two or three feet high. Leaves composite, foliola oval, and deeply cut at the edges. Flowers white, with a yellow disk, on naked branched pedicles, in clusters, terminal. June. P. On waste ground. *Ger.* 651. 1.

Maritima,

2. *Maritima. Sea Feverfew.* Receptacle hemispherical. Leaves bipinnated, substantial, short; convex above, carinated beneath, dark green. July. P. On the coast. *Raj. Syn.* p. 186.
3. *Chamomilla. Corn Feverfew, or Common Chamomile.* Stem slender, branched, near two feet high. Leaves supradecomposite, segments narrow. Flowers white, with a yellow disk. Receptacle conical; scales of the calyx equal at the margin. June. In corn-fields. *Curt.* v. 63.
4. *Suaveolens? Sweet-scented Feverfew.* Receptacle conic. Radii deflex. Scales of the calyx equal at the margin. Leaves in narrow segments, fragrant. May. On sandy ground frequent. Properly a variety of the last.

ANTHEMIS. *Chamomile.* Calyx hemispherical; scales linear, sub-equal. Receptacle scaly, conic. Down o. Radii more than five.

1. *Maritima. Sea C.* Stem prostrate, branched, purplish. Leaves pinnated, dentated, substantial, punctured, purplish. Flowers white, with a yellow disk, single, terminal; pedicles somewhat downy, and thicker towards the end. Aug. P. On the coast. S. Brit.
2. *Nobilis. Sweet-scented C.* Stem procumbent, much branched, about a foot long. Leaves pinnato-composite, linear, acute, somewhat downy. Flowers white, with a yellow disk, single, terminal; radii deflex. July, Aug. P. In pastures, &c. *Ger.* 755. 4.

3. *Avien-*

3. *Arvensis*. *Corn C.* Stem single, branched, about a foot high. Leaves in numerous, narrow, obtuse segments. Flowers large, white, with a yellow disk, without smell. July B. In corn-fields, &c. *Pet.* 19. 8.
4. *Cotula*. *Stinking C.* Stem erect, branched, a foot and half high. Leaves pinnato-decomposited; pinnæ broader than the last. Flower white, with a yellow disk; radii numerous, tridentate. June, July. A. In corn-fields, &c. *Curt.* v. 61.
5. *Tinctoria*. *Common Ox-eye*. Stem much branched, two feet high. Leaves pinnatifid; segments serrated, downy beneath. Flowers intirely yellow, large, in clusters, terminal. July. In meadows, &c. *Ger.* 747. S. Brit.

ACHILLEA. Calyx oval, imbricated. Radii trinervate, tridentate, short, broad, few. Receptacle scaly. Down o.

1. *Millefolium*. *Yarrow*, or *Milfoil*. Stem erect, about a foot high. Leaves doubly pinnated; pinnæ numerous; pinnulæ trifid, quinquifid. Flowers white, often reddish, in a kind of dense umbel, terminal. May, July. P. In meadows and pastures very common. *Ger.* 1072. 2.
2. *Ptarmica*. *Sneeze-wort*. Stem firm, erect, branched, two feet high. Leaves long, narrow, pointed, serrated. Flowers small, white, in a loose kind of umbel, terminal; calyx a little hairy; radii not more than eleven. Aug. P. In moist woods, &c. *Curt.* v. 60.

### III. POLY-



## III. POLYGAMIA. FRUSTRANEA.

Florets of the disk hermaphrodite; those of the radius neuter.

**CENTAUREA.** Calyx imbricated. Floscules tubular; those in the radius larger, and irregularly divided. Receptacle bristly. Down simple.

\* *Scales of the calyx fringed.*

1. *Cyanus.* *Blue-bottles.* Stem firm, erect, slender, ribbed, somewhat downy, about a foot and half high, branched towards the top, with long, narrow, sessile leaves; those below are dentated. Flowers blue, large, terminal. July. A. In corn fields. *Ger.* 732. 2.

2. *Scabiosa.* *Great Knapweed, or Matfellow.* Stem hard, erect, branched, 2 or 3 feet high. Leaves alternate, pinnatifid; segments lance-shaped. Flowers purple, in roundish compact heads; single, on long naked pedicles; fringe of the scales brown. June, July. P. In corn-fields, &c. *Ger.* 727. 2.

3. *Nigra.* *Common Knapweed.* Stem erect, 2 or 3 feet high, with angular branches. Leaves lance-shaped; those below sinuated, dentated. Flowers purple; florets all tubular, hermaphrodite. Calyx fringed, black. July, Aug. P. In meadows, &c. *Ger.* 727. 1.

\*\* *Scales of the calyx spinous.*

4. *Calcitrapa.* *Star Thistle.* Stem branched, about 2 feet long, not erect. Leaves soft, hairy,



ry, pinnatifid, dentated, sessile. Flowers purple, in sessile, lateral heads; external florets form a regular radiated circle. July. A. In meadows, &c. *Ger.* 1066. 1. S. Brit.

5. *Solstitialis*. *St. Barnaby's Thistle*. Stem erect, about two feet high. Leaves on the stem pinnatifid; those on the branches decurrent, lance-shaped. Flowers yellow, in small heads, terminal; scales of the calyx with double spines. July. A. In hedges, not common. *Ger.* 1166. 2. S. Brit.

#### IV. POLYGAMIA NECESSARIA.

Florets of the disk *male*; those of the radius *female*.

FILAGO. Calyx imbricated. Hermaphrodite florets in the disk numerous; feminine scarce visible, among the scales of the calyx. Receptacle naked. Down 0.

1. *Germanica*. *Common Cudweed*. Stem erect, forked, branched, with many leaves, near a foot high. Leaves long, narrow, downy. Flowers brown, in round downy heads at the division of the branches. Calyx pentagonal; scales glossy, acute. July. A. In meadows, &c. *Ger.* 642. 10.
2. *Montana*. *Least Cudweed*. Stem erect, forked, branched, from three to six inches high. Leaves numerous, downy, very narrow, half an inch long. Flowers in conical heads, axillary and lateral. July. A. In sandy meadows, &c. *Ger.* 641. 9.
3. *Gallica*.

3. Gallica. *Corn Cudweed*. Stem forked, erect, much branched, three inches high. Leaves very narrow. Flowers pyramidal, axillary, numerous. June, July. In corn-fields. *Pet.* 18. 12.

## VI. MONOGAMIA.

Flowers simple.

JASIONE. Calyx of 10 leaves. Corolla of 5 petals, regular. Capsule pentagonal, below the germen, bilocular.

1. Montana. *Hairy Sheep's Scabious*. Stems several, branched, not quite erect, about a foot high. Leaves on the ground numerous, long, narrow, obtuse, waved, serrated, hairy. Flowers blue, on pedicles, in roundish heads, on long naked branches. June, July. A. Heaths, pastures, &c. *Curt.* iv. 58.

LOBELIA. Calyx quinquefid. Corolla monopetalous, irregular. Capsule below the germen, bilocular.

1. Dortmanna. *Water Gladiole*. Stem naked, or with few leaves, about two feet high. Leaves from the root 12 or 14 in number, narrow, bilocular, intire. Flowers pale purple, in loose spikes, pendulous. July, Aug. In the lakes in the North. *Lightf.* xxi. p. 505.
2. Urens. *Biting G.* Stem 12 inches, a little erect. Lower leaves roundish, notched, the upper lanceolate, serrated, sessile, glued at the base. Flowers in bunches, blue;

blue; 2 pale spots in the palate. *H. ox.*  
v. 56. WITH.

VIOLA. Calyx of 5 leaves, short. Corolla of 5 petals, irregular; the upper one notched, and ending in a spur behind; the lateral pair obtuse; the 2 under petals broader. Stamina 5. Style 1. Capsule above the germen, unilocular, trivalve.

\* *Without stem.*

1. *Hirta. Hairy Violet.* Leaves heart-shaped, hairy. Flowers pale blue, large, inodorous. Apr. P. In hedges, &c. *Curt.* i. 64.
2. *Palustris. Marsh Violet.* Leaves smooth, reniform, 2 or 3 on each foot-stalk. Flowers pale blue, small, inodorous. June. P. In marshy ground. *Curt.* iii. 58.
3. *Odorata. Purple sweet Violet.* Leaves heart-shaped, notched. Flowers deep purple, single. Creeping scions. Mar. Apr. P. In hedges. *Curt.* i. 63.

\* \* *With stems.*

4. *Canina. Dog's Violet.* Stem procumbent, and then rising upwards, leafy. Leaves heart-shaped, pointed. Flowers inodorous, pale blue, single, on pedicles from the branches. Apr. P. On heaths, &c. *Curt.* ii. 61.
5. *Tricolor. Pansies, Heart's-Ease, or three Faces under a Hood.* Stems diffuse, procumbent, triangular. Leaves oblong, cut at the edges; stipulæ dentated. Flowers purple, yellow and light blue; inodorous. A. May—Sept. *Curt.* i. 65.

6. *Lutea.*

6. *Lutea. Yellow Violet.* Stem erect, triangular, from an inch to a foot long. Leaves oval, notched, stipulæ intire. Flowers large, yellow, on long pedicles. May—Aug. P. On the mountains in the North and Wales.

IMPATIENS. Calyx of 2 leaves, small, coloured, deciduous. Corolla of 5 petals, irregular, with a spur behind. Stamina 5, very short. Style c; stigma simple. Capsule unilocular, quinquevalve.

1. *Noli-tangere. Touch me not, or Yellow Balsamine.* Stem erect, branched, tender, about 2 feet high, swollen beneath the branches. Leaves oval, serrated, on long foot-stalks. Flowers yellow, the lateral petals spotted with red, pendulous, 2 on each pedicle, numerous, from the axæ of the leaves. Aug. A. On the banks of lakes, &c. in the North. Ger. 446. S. Brit.

## C L A S S XX.

## G Y N A N D R I A.

Stamina growing either upon the style, or on the receptacle elongated in the form of a style, supporting both stamina and pistillum.

## I. D I A N D R I A.

Stamina 2.

Germen below the corolla, twisted. Petals 5; the 2 interior usually meet and form a helmet, the under lip of which becomes a nectarium, and supplies the place of a pistillum and sixth petal. The style, adhering to the inner margin of the nectarium, is scarce distinguishable. Filaments 2, very short. Capsule unilocular, trivalve. Seeds numerous, very small.

ORCHIS. Calyx 0. Nectarium corniform, behind the flower, fixt to the receptacle between the petals. Leaves vaginal. Flowers in spikes. Stem simple, single.

\* *Bulbs of the root not divided.*

- I. Bifolia. *Butterfly Orchis*. Root double, conical. Stem about a foot and a half high, scaly. Leaves generally 2, long, and 2 or 3 inches broad. Flowers white, yellowish, in long thin spikes; spur very long and slender;

slender; petals spreading, fragrant. May, June. P. In wet pastures, &c. Ger. 211. 2.

2. *Pyramidalis. Purple late O.* Root a double bulb. Stem a foot high. Leaves radical, about 4 inches long, and half an inch broad; floral leaves shorter than the flower. Flowers pale purple, in short compact spikes; lip of the nectarium trifid; spur long. June, July. In dry, chalky pastures. Ger. 210. 4.
3. *Morio. Female Fool's O.* Root a double bulb. Stem from 6 inches to a foot long. Leaves long, narrow, pointed. Flowers white, or red, or violet, few, on a short, thin spike; lip of the nectarium quadrifid, notched; spur obtuse; petals all connivent. May, June. P. In wet meadows. Curt. iii. 59.
4. *Mascula. Male Fool's O.* Bulbs large. Stem a foot high. Leaves broad, elliptical, generally spotted with black. Flowers large, purple, on long loose spikes; dorsal petals reflex; lip of the nectarium quadrifid, notched; spur horizontal, obtuse. May. P. In meadows, &c. Curt. ii. 62.
5. *Ustulata. Little purple O.* Bulb double, small. Stem 8 or 10 inches high. Leaves obtuse. Flowers small, in a short dense spike, purple and white; lip of the nectarium quadrifid, with red spots; petals distinct; spur obtuse, short. May, Jun. P. In dry pastures, &c. Ger. 207. S. Br.
6. *Militaris. Man O.* Bulb double. Stem a foot high. Leaves not spotted, elliptical, obtuse. Flowers greyish white, or

dark purple; petals confluent; lip of the nectarium quinquifid, with purple spots; spur obtuse. June. P. On chalk hills. *Ger.* 205. 2. S. Brit.

\* \* *Bulbs palmated.*

7. *Latifolia.* *Male-handed O.* Stem hollow, a foot and half high. Leaves broad, elliptical. Spike long, dense, obtuse. Floral leaves longer than the flower. Flowers purple; lateral petals curled upward; lip of the nectarium trilobed, ferrated; lateral lobes reflex. Spur conical, very thick. May, June. P. In meadows, &c. *Curt.* v. 65.

8. *Maculata.* *Female-handed O.* Root spreading. Leaves spotted. Three exterior petals erect. Lip of the nectarium trifid; lateral lobes large, notched plane. June. P. In wet meadows, &c. *Ger.* 220.

9. *Conopsea.* *Red-handed O.* Stem a foot high, or more. Leaves long, not an inch broad. Spike very long. Floral leaves broad at the base, narrow at the point. Flowers red; 2 petals spreading. Lip of the nectarium trifid; spur very slender, longer than the germen. June. P. In meadows, &c. *Ger.* 227. 5.

\* \* \* *Bulbs fasciculated.*

10. *Abortiva.* *Purple Bird's-nest.* Root fibrous, interwoven. Stem purple, near a foot long. Leaves purplish, small. Flowers violet; lip of the nectarium oval, intire. May, P. In dry meadows. S. Brit.

SATYRIUM. Calyx o. Nectarium scrotiform, behind the flower. Leaves vaginal. Flowers on a spike.

1. Hir-



1. *Hircinum*. *Lizzard Flower*, or *Goat Orchis*. Root a double undivided bulb. Stem 2 feet high. Leaves large, pointed. Flowers greenish white, purple within. Lip of the nectarium trifid; the middle segment very long, like a beard. Spur very short, obtuse. June, July. P. On chalk hills. *Ger.* 210. 1. S. Brit.
2. *Viride*. *Frog Satyrion*, or *Orchis*. Root palmated. Leaves oblong, obtuse. Stem a foot high. Flowers large, yellowish, green, with some purple. Spur short, broad. May, June. P. In dry pastures, &c. *Ger.* 224. 9.
3. *Albidum*. *White Satyrion*. Roots numerous, cylindrical, distich. Leaves elliptical, obtuse, some on the stem. Spike long, compact. Flowers with 3 large white and 2 smaller greenish yellow petals. Spur very short, tumid. Lip of the nectarium trifid, acute; middle segment largest. June. P. In moist meadows. *Fl. dan.* 115.
4. *Repens*. *Bastard Orchis*. Bulbs fibrous, slender, branched. Stem a foot high. Radical leaves oval, like those of the common plantain; on the stem very small. Spike dense, unilateral. Flowers greenish yellow; petals 4, hairy. *Lightf.* xxii. p. 520.

OPHRYS. Calyx o. Nectarium pendent, longer than the petals, carinated behind. Two of the 5 petals exterior. Leaves vaginal. Flowers spicate.

\* *Bulbs branched.*

1. *Nidus Avis. Bird's Nest.* Bulbs fibrous, implicated. Stem a foot high, with a few brown scales, without leaves. Flowers brown. Spike long. Apr May. P. In woods, &c. *Ger.* 228. 1.
2. *Corallorhiza. Coral-rooted O.* Bulbs branched, waved. Stem 7 inches, sheathed, without leaves. Lip of the nectarium trifid. Flowers in a thin spike, green; stamina 4. Capsules nod. *Lightf.* xxiii. p. 523. July, Aug. P.
3. *Ovata. Common Twyblade.* Bulb fibrous, implicated. Stem 8 or 10 inches high, with 2 opposite oval leaves, 2 or 3 inches from the ground. Spike long. Flowers green. Lip of the nectarium bifid. May, June, P. In moist woods, &c. *Curt.* 60.
4. *Spiralis. Triple Lady's Traces.* Bulbs oblong, aggregated. Stem 8 inches high, or more. Leaves long, acute, some on the stalk. Spikes generally unilateral. Flowers yellowish white. Lip of the nectarium undivided, notched. Fragrant. Aug. In dry pastures. *Curt.* iv. 59. S. Brit.
5. *Cordata. Least Twyblade.* Bulb fibrous. Stem 5 or 6 inches high, with 2 opposite, heart-shaped leaves. Flowers whitish. Lip of the nectarium bifid. July. P. On turf bogs in the North. *Pet.* 70. 11.

\* \* *Bulbs round.*

6. *Loeselii. Dwarf Orchis.* Bulbs roundish. Stalk naked, triangular. Leaves lance-shaped, 2, nearly the length of the stalk. Lip of the nectarium oval. Flowers yellowish

yellowish green. July. P. On bogs, &c. S. Brit.

7. *Paludosa. Least Orchis.* Bulbs oval, curved. Stalk pentagonal, almost naked. Radical leaves 3 or 4, alternate, rough at the apex. Flowers yellowish green, in a cluster, terminal; upper petal erect, arched. Lip of the nectarium reflex, intricate. Bulbs catenary. June, July. P.
8. *Monorchis. Yellow, or Musk Orchis.* Bulb single. Stalk naked, slender, from 4 to 8 inches high. Radical leaves 2 or 3. Flowers green-yellow. Spur o. July. P. In dry pastures, but not frequent. *Fl. dan.* 102. S. Brit.
9. *Anthrophora. Green Man-Orchis.* Bulb double. Stalk a foot high, or more, with some leaves. Radical leaves long, narrow. Flowers greenish. Lip of the nectarium tripartite; middle segment longer, bifid. Spur o. June. P. On chalk hills. *Pet.* 68. 8. S. Brit.
10. *Myodes. Fly Orchis.* Bulb double. Stem 2 feet high, beset with long narrow leaves. Spike long, thin. Flowers resemble a fly. Lip of the nectarium quadrifid. June—Aug. P. In dry pastures. *Ger.* 213. 6. S. Brit.
11. *Apifera. Bee O.* Stem leafy, 12 inches. Lip of the nectarium quinquifid, dark purple. Leaves broader and shorter than in the Fly O. Apr, May. P. S. Brit. *Curt.* i. 66.

SERAPIAS. Calyx o. Petals 5. Nectarium the length of the petals, oval, gibbous;

bous; base excavated, bifid; lip oval.  
Spur o. Bulbs fibrous.

1. *Latifolia*. *Broad-leaved Hellebrine*. Stem 2 feet high, smooth. Leaves oval, sheathing, large. Flowers 30, on a loose spike, pendant, brownish green. Lip obtuse, notched, equal with the petals. Fruit pendulous. July, Aug. P. In woods, hedges, &c. *Ger.* 442. 1.
2. *Longifolia*. *Long-leaved Helleborine*. Stem taller. Leaves sessile, long, narrow, pointed. Flowers pendant, 20, on thin loose spikes; lip of the nectarium obtuse, longer than the petals. Aug. P. In woods, &c. *Ger.* 442. 1.
3. *Ensisolia*. *Sword-leaved H.* Stem 14 inches. Leaves distich; floral leaves very small. Flowers erect. Lip shorter than the petals. *Fl. dan.* 506. *MUR.*
4. *Grandiflora*. *White-flowered H.* Flowers large, white, erect. Leaves ensiform. Lip obtuse, shorter than the petals, with 3 prominent yellow lines. *Ger.* 442. June. P.

**CYPRIPEDIUM.** Nectarium inflated, hollow, within the lower petal. Calyx o. Petals 4 or 5, long, narrow, erect. Capsule oval, 3-angular.

1. *Calceolus*. *Ladies slipper*. Flower purple, of 4 petals. Stem 14 inches. Leaves sheathing, hairy, ribbed. Lip like a yellow slipper. *Ger.* 443. 2. July. P. S. Brit.

## II. HEXANDRIA.

Stamina 6.

ARISTOLOCHIA. Calyx 0. Corolla of 1 petal, lingulate, entire. Capsule large, beneath; cells 6.

1. Clematitis. *Slender Birth-wort*. Stem erect, 3 feet, round, scored. Leaves cordate, alternate, glossy, pale. Flowers 6 or 8, green-yellow. *Mill. ic.* 51. 1. July, Sept. P. WITH. S. Brit.

ZOSTERA. Spadix linear, bearing fruit on one side only. Calyx 0. Corolla 0. Stamina alternate. Seeds single, alternate.

1. Marina. *Grass Wrack*. Leaves very long, plane, narrow, growing under water, and floating with the tide. On the coast. *Ger.* 1569. 8.

CLASS

## CLASS XXI.

## MONOECIA.

Male and female flowers on the same plant.

## I. MONANDRIA.

Male flowers with one stamen.

ARUM. Calyx a spathe or half cone of 1 leaf, rolled up at the bottom, pointed at the top, large, coloured within. Spadix simple, clavated, coloured, naked, above, female below, male in the middle. Corolla 0.

- i. Maculatum. *Wake-Robin*, or *Cuckow-pint*. Leaves glossy, large, arrow-shaped, often spotted, intire. Cone white, erect. Berries red, in a naked cluster, on the top of the stalk. May. P. In hedges frequent. *Curt.* ii. 63.

ZANNICHELLIA. *Male*: Calyx 0. Corolla 0. *Female*: Calyx of 1 leaf. Corolla 0. Pistilla 4. Seeds 4.

- i. Palustris. *Horned Pondweed*. Stems jointed, with many branches. Leaves opposite, long, narrow, pointed. Flowers in the axæ of the leaves, male and female together. July. A. In ditches, &c. frequent. *Fl. dan.* 67.

CAL-

CALLITRICHE. Verna. *Vernal Starwort*. Vide *Monandria Digynia*.

CHARA. *Male*. Calyx o. Corolla o, Anthera below the germen. *Female*. Calyx 4 leaves. Cor. o. Stigma quin-  
quifid.

1. Tomentosa. *Brittle C.* Flesh-colour, Stem 14 inches, twisted, flat, with oval prickles. Gritty in the mouth. In ditches and pools. June—Oct. A. *H. ex.* xv. 4. 9. S. Brit.
2. Vulgaris. *Stinking Water-horsetail*. Stem smooth, 8 or 9 inches, round, smooth, striated, jointed. Leaves in whirls, long, narrow, dentated on the inner side. In ditches and pools. Jul. Aug. A.
3. Hispida. *Prickly C.* Stems numerous, 6 inches, round, striated, twisted, jointed, spinous. Leaves long, slender, jointed, in whirls, white-green. Ditches and pools. June—Oct.
4. Flexilis. *Flexible C.* Diaphanous, without spines. Stem 9 inches. Leaves in whirls, generally forked, smooth. Frustrification single or in pairs, in the fork of the leaves. June—Oct. A. In ponds, &c.

## II. DIANDRIA.

Male flowers with two stamina.

LEMNA. *Male*: Calyx of 1 leaf, obtuse, intire. Corolla o. *Female*: Calyx as in the male. Corolla o. Style 1. Capsule unilocular. Root a perpendicular, conical.



nical, hollow thread. N. B. In the *Genera Plantarum*, Linnæus makes one of the flowers hermaphrodite instead of male: if so, it belongs to the class *Polygamia*. The flowers are so minute and fugitive as very rarely to be seen.

1. *Trifulca*. *Ivy-leaved Duck's Meat*. Stem branched. Leaves lance-shaped, on pedicles, numerous, swimming on the water. Roots numerous, suspended. May, June. P. In pools and ditches. *Ger.* 830. 2.
2. *Minor*. *Leaf Duck's Meat*. Leaf single, sessile, somewhat oval, very small, with a single root, swimming loose in the water. Jun. A. On ponds frequent. *Ger.* 829.
3. *Polyrhiza*. *Great Duck's Meat*. Leaves single, larger, thick, somewhat oval, green above, deep purple beneath, with several roots to each, swimming loose like the last. June, July. A. In ditches.

### III. TRIANDRIA.

Male flowers with three stamina.

**TYPHA.** *Male*: in a cylindrical compact catkin on the top of the culm; proper calyx of 3 very narrow leaves. Corolla 0. *Female*: on a catkin below the male. Calyx a kind of radiate down. Corolla 0. Seed single.

1. *Latifolia*. *Great Cat's-tail*, or *Reed-mace*. Culm 6 feet high, firm, jointed. Leaves thick, convex, 2 or 3 feet long, not quite an inch broad. Male and female catkin near each  
each

each other. July. P. On the banks of rivers. *Curt.* iii. 61.

2. *Angustifolia*. *Narrow-leaved Cat's-tail*. Leaves semicylindrical. Male and female spike remote, and slender. July. P. In pools and ditches. *Curt.* iii. 62.

SPARGANIUM. *Males*: numerous, collected in a roundish head, compact, imbricated; proper calyx of 3 leaves, linear, deciduous; corolla 0. *Female*: like the male. Fruit a dry berry, containing two hard seeds.

1. *Erectum*. *Great Bur Reed*. Stem firm, branched, 2 feet high. Leaves triangular, long, succulent, not quite half an inch broad. Male heads smaller than the female. July. Banks of rivers, ditches, &c. *Curt.* v. 66.
2. *Natans*. *Leafy Bur Reed*. Stem simple, short. Leaves flat, a foot long, swimming, obtuse. Heads few. July. In pools and slow rivers, but rare.

*Simplex*. I think, a variety. *Curt.* v. 67.

CAREX. *Male*: catkin imbricated, oblong; calyx of 1 leaf, lance-shaped, acute, concave; corolla 0. *Female*: like the male. Nectarium inflated, tridentate. Stigmata 3. Seed single, triangular.

\* *Spike single, simple.*

1. *Capitata*. *Round headed Carex*, or *Cyperus Grass*. Culm triangular, slender, short. Leaves very narrow. Spike oval; male flowers  
at

at the top. June. P. On wet commons.  
*H. ox.* viii. 12.

2. *Pulicaris. Flea Carex, or Flea Grass.* Culm and leaves capillary. Capsules oblong, pointed, reflex, resembling fleas. June. P. On Hampstead heath, &c. *H. ox.* viii. 12. 21.
3. *Pauciflora. Few-flowered C.* LIGHTF. Culm 4 inches, somewhat triangular, smooth, striated, with 2 leaves. Spike of 1 or 2 brown male flowers at the top, and 3 or 4 female green ones beneath. June. P. In mountainous heaths. N. Brit. *Lightf.* vi. 77.

• • *Male and female on the same spikes, or spiculæ.*

4. *Incurva. Curved C.* LIGHTF. Culm curved, 4 inches, 3-angular. Leaves 2 or 3, smooth. Spike 3-angular. Spiculæ clustered, with male flowers at the top. Involucrum 0. July. P. *Lightf.* xxiv. p. 544.
5. *Disticha. Brown C.* Spike brown, composite, sub-distich. Spiculæ oval, imbricated. 12 inches, 3-angular. Bractea nearly as long as the spike. May, June. P. HUDS.
6. *Arenaria. Sea Carex.* Spike composite. Culm triangular, about two feet high. Lower spiculæ more remote, with a longer leaf. Root creeping. June, July. P. In the sand on the sea-shore.
7. *Leporina. Naked Carex.* Culm naked, 2 feet high. Spike composite; spiculæ 5 or 8, compact, alternate, oval, sessile, broad, compressed, soft, short. Scales between the spiculæ imbricated, triangular, grey, with

with a yellow nerve. June, July. In wet meadows. *H. ox.* viii. 12. 29.

8. *Brizoides. Rough Carex.* Culm triangular, rough, a foot and half high. Leaf very long and narrow. Spike composite, distich, naked; spiculæ cylindrical, alternate, acute, contingent, compact, white or greenish. June. In fens, &c.
9. *Vulpina. Great Carex.* Culm triangular, naked, about a foot high. Leaves very long, narrow, sharp edged, smooth. Spike supradecomposite, an inch long, compact above, bearded; spiculæ 3 to 6, sessile, broad, male above. July. Banks of rivers.
10. *Muricata. Prickly Carex.* Culm naked, triangular, 6 or 8 inches high. Leaves narrow, harsh, the length of the culm. Spike loose; spiculæ sessile, distinct, spinous. June. In moist woods, &c. *Fl. dan.* 284.
11. *Remota. Long-leaved Carex.* Culm weak, branched, leafy. Leaves very narrow and long. Spikes simple, small, in the alæ of the leaves, sessile; scales white, with a greenish line. Capsules 10 or 12 in each spike. Aug. In moist woods, &c. *Fl. dan.* 370.
12. *Canescens. Grey Carex.* Culm naked, compressed. Spiculæ remote, sessile, obtuse, compact, turgid. Capsules oval, obtuse. May—Aug. In hedges, moist woods, &c.
13. *Paniculata. Panicked Carex.* Culm triangular, harsh, 3 feet high. Leaves harsh, narrow. Panicle long, loose, brown. June, July. On bogs, &c.

\*\*\* *Male and female on different spikes; the latter sessile.*

14. *Flava. Yellow Carex.* Culm triangular, 2 foot high. Leaves long, smooth. Male spike, cylindrical, slender; females 2 or 3. Capsules acute, recurved, rigid. June. In wet meadows, bogs, &c. Ger. 17. 1.
15. *Pedata. Bird's-foot Carex.* Culm naked, 6 inches high. Leaves narrow. Male spike terminal, slender, acute, red-brown; female spikes 2, 3, or 4, with few scales, not closely imbricated, containing about 7 floscules.
16. *Montana. Mountain C.* Female spikes sessile, oval, sub-solitary, near the male. Culm naked, 4 inches high. Capsule downy. Apr. P. Ger. 22. 8.
17. *Tomentosa. Downy C.* Female spikes sub-pedunculate. Capsules sub-globular, downy. Male spike dark brown. Jul. P.
18. *Pilulifera. Round-headed C.* Spikes sessile, terminal, compact, globular; male spike oblong. Leaves very slender. June, July. In meadows, &c. frequent.
19. *Saxatilis. Vernal C.* Culm rotundo-triangular, naked, a foot high. Leaves narrow. Spikes 3, oval, sessile, alternate; male oblong; female black. April, May. In mountainous pastures.

\*\*\* *Male and female on different spikes; the latter on pedicles.*

20. *Atrata. Black C.* Culm 12 inches, triangular. Leaves one-sixth inch broad, harsh. Spikes half an inch long, almost black, terminal. Stamina 2. Styles 3. Jun. P.
21. *Limosa.*

21. Limosa. *Creeping Bog Carex*. Root jointed, creeping. Culm 12 inches, triangular. Leaves linear, narrow. Male spike, terminal, cylindrical, brown; female, generally 2, oval, below, pendulous when feeding. June. P. *Fl. dan.* 646.
22. Capillaris. *Capillary C.* Male spike erect; females 3, oblong, pendant when in seed, naked, pointed, on capillary peduncles. Culm when first flowering 2 or 3 inches high; afterwards 6 or 7. Jul. P. *Fl. dan.* 168.
23. Panicea. *Pink C.* Spikes pedunculate, erect, remote; female linear; capsules obtuse, inflated. Culm 12 inches. Scales brown, shorter than the capsule. Most subject to blite. June. P. *Fl. dan.* 443.
24. Pallescens. *Pale Carex*. Culm leafy, a foot high. Leaves narrow, harsh. Spikes terminal, compact; male spike slender, acute, erect, greenish white; females yellowish, drooping, oval, imbricated, with capsules obtuse, compact. Jun. P. In moist meadows, &c.
25. Pseudo Cyperus. *Bastard Carex*. Culm 3 feet high. Leaves spongy, large, near an inch broad. Spikes yellowish; male spike 2 inches long, with hairy, pointed scales; females 2 or 3, pendent, with capsules double bearded. July. Banks of ditches, &c. *Ger.* 29. 2.
26. Distans. *Loose Carex*. Culm triangular, a foot and half high. Leaves soft. Spikes very distant from each other; male spike terminal, obtuse, not quite an inch long; females two or three, on short  

T 2

pedicles,



pedicles, in the alæ of the leaves. June.  
On bogs, &c.

\*\*\*\*\* *Male and female on different spikes ; male several.*

27. *Pendula.* *Great pendulous C.* Female spikes very long, pendulous; capsules pointed. Culm 3 or 4 feet. Leaves half an inch broad, sharp. Scales brown, with a green dorsal nerve. *Curt.* iii. 63.
28. *Acuta.* *Brown Carex.* Culm about 6 inches long, triangular. Spikes brown or black; females long and slender, alternate, on short pedicles, except the lower ones. May. On the banks of rivulets, &c. *Curt.* iv. 61.
29. *Riparia.* *Great C.* Male spikes more than 1, with awn-taper-pointed scales; females with awn-pointed scale. *St. in With.* Leaves sea-green. *Curt.* iv. 60.
30. *Vesicaria.* *Bladder Carex.* Culm triangular, 4 or 5 feet high. Leaves narrow, 2 feet long, and very harsh. Male spikes 2 or 3, very slender, 2 inches long, brown; females 2 to 4, yellow. Capsules inflated, pointed, with a bifid neck. June. In fens, &c. frequent. *Fl. dan.* 647.
31. *Hirta.* *Hairy Carex.* Soft and hairy. Spikes remote, erect; males 2 or 3, compact; females 3, loose, on short pedicles, in the alæ of the leaves. Capsules hairy, conical, bifid. June. In wet meadows, &c. *Fl. dan.* 425.

**ERIOCAULON.** *Common calyx imbricated; proper, of 2 leaves. Males, in the*



the middle of the disk, dipetalous, erect, obtuse; stamina 4, inserted in the corolla. *Females*, in the circumference, numerous; *corolla* monopetalous, bipartite; *germ.* above; *style* divided.

1. Decangulare. *Net-wort*. Culm 10-angular, a little twisted, 12 to 18 inches, naked upwards, diaphanous, reticulate. Leaves 2 inches, ensiform, surrounding the stem at the base, under water. Lakes in the Isle of Sky. Sept. *Lightf. Penn. Voyage to the Hebrides. Vol. I. tab. 39.*

LITTORELLA. *Males*: Calyx of 4 leaves. Corolla quadrifid, erect; stamina very long, in the receptacle. *Females*: Calyx 0. Corolla conical, trifid, persisting. Style very long. Seed a kernel.

1. Lacustris. *Plantain Shore-weed*. Root fibrous, long, running. Leaves 2 inches long, semicylindrical, linear, acute, in tufts. Stalks 3 or 4, one inch and half, terminated by a green male flower; females sessile at the base. July, Aug. P. *Fl. dan. 170. LIGHTF.*

#### IV. TETRANDRIA.

Male flowers with four stamina.

BETULA. *Male*: Calyx of 1 leaf, trifid, trifloral; corolla quadripartite. *Female*: Calyx of 1 leaf, sub-trifid, bifloral. Catkin imbricated, cylindrical. Seed oval, winged.

T 3

1. Alba.

1. *Alba. Birch Tree.* Bark white, smooth, glossy. Leaves on long foot-stalks, oval, pointed, serrated, glossy. *Ger.* 1478.
2. *Nana. Dwarf Birch.* A shrub, a yard high, bark brown. Leaves circular, with 10 to 14 notches, generally 3 from each bud. Catkins sessile, oval, erect. *Lightf.* xxv. p. 575. *N. Brit.*
3. *Alnus. Alder Tree.* Not large, nor erect. Bark smooth. Leaves round, without point, serrated, clammy, nervous. Cones brown. July. Near water frequent. *Ger.* 1477. 1.

**BUXUS.** *Male:* Calyx of 3 leaves; petals 2. *Female:* Calyx of 4 leaves; petals 3; styles 3, very short. Capsule with 3 beaks, trilocular. Seeds 2.

1. *Sempervirens. Box.* A low shrub. Leaves oval, glossy, thick. Flowers greenish white. Apr. In woods, but rare. *Ger.* 1410. *S. Brit.*

**URTICA.** *Male:* Calyx of 4 leaves. Corolla 0. Nectarium minute, central, urn-fashioned. *Female:* Calyx bivalve. Corolla 0. Seed single, oval, glossy.

1. *Pilulifera. Roman Nettle.* Stalk branched, 2 or 3 feet high. Leaves opposite, oval, serrated, stinging. Fruit globose. Aug. On waste ground. *Ger.* 707. 1. *S. Brit.*
2. *Urens. Less Nettle.* Stem a foot high. Leaves roundish, deeply serrated, opposite, burning. Aug. In gardens, waste grounds, &c. *Fl. dan.* 739.

V. PENTANDRIA.

Male flowers with five stamina.

**XANTHIUM.** *Male* flowers composite, Common calyx imbricated. Corollulæ monopetalous, tubular, quinquifid. *Female*: Calyx involucre of 2 leaves, containing 2 flowers. Corolla 0. Drupa dry, prickly. Nucleus bilocular.

1. *Strumarium. Lefs Burdock.* Stem a foot and half high, thick, often spotted. Leaves heart-shaped, lobed, on long foot-stalks. Flowers male and female many together, in the axæ of the leaves. Aug. Sept. A. On waste ground, but rare. *Ger.* 809. 2. *S. Brit.*

**AMARANTHUS.** *Males*: Calyx of 3 or 5 leaves, erect, coloured, sharp. *Females*: Calyx the same; also corolla 0. Styles 3. Capsule 1—cell, cut round. Seed 1.

1. *Blitum. Small red Blite.* Stamina 3. Clusters lateral. Flowers trifid. Leaves alternate, oval, with a deep notch at the end. Stem diffuse. Among rubbish. Aug. A. *Ger.* 321. 4.

VI. POLYANDRIA.

Male flowers with many stamina.

**CERATOPHYLLUM,** *Male*: Calyx of many segments. Corolla 0. Stamina very minute, 16 to 20. *Female*: Calyx  
T 4
like

like the male. Corolla o. Pistillum single; style o; stigma obtuse, oblique. Seed single, naked.

1. *Demersum*. *Horned Pondweed*, or *Water Milfoil*. Stem a foot long, much branched. Leaves several together in whirls, twice forked, harsh, thick. Branches collected at the top into a thick nest. July. P. In ditches, &c. under water, frequent. *Fl. dan.* 510.

MYRIOPHYLLUM. Calyx of 4 leaves. Corolla o. Stamina 8. Pistilla 4; style o. Seeds 4, naked.

1. *Spicatum*. *Spiked*, or *feathered*, *Water Milfoil*. Stem round, hollow, jointed, striated, branched, a foot and half long. Leaves feathered, 5 from each joint. Those stalks which bear the flowers have no leaves. Male flowers on spikes, in small distant clusters. June, July. P. In stagnant water frequent. *Fl. dan.* 681.
2. *Verticillatum*. *Less Water Milfoil*. Resembles the last, except that all the flowers grow in whirls, in the axæ of the leaves. Jul. In ditches, &c. frequent.—N. B. Sometimes the flowers are hermaphrodite. *Pet.* 6. 8. *S. Brit.*

SAGITTARIA. Calyx of 3 leaves. Petals 3. Stamina generally 24. Pistilla very numerous; styles very short. Seeds many, naked. Male flowers above.

1. *Sagittifolia*. *Arrow-head*. Stem thick, spongy, striated. Leaves arrow-shaped, on long

long foot-stalks. Flowers white, large, generally 3 together, on single pedicels. June. In ditches, &c. *Ger.* 416. 2. *S. Brit.*

**POTERIUM.** Male and female flowers on the same spike, the latter uppermost. Calyx of 3 leaves, coloured, soon falling off. Corolla of 4 segments, united only at the base. Stamina 30 or 40, long, slender. Pistilla 2. Fruit a berry, formed of the tube of the corolla.

1. *Sanguisorba.* *Burnet.* Some of the flowers hermaphrodite; stem angular, a foot high, brown. Leaves pinnated, pinnæ about 10 pair with an odd one, serrated; middle rib hairy. Flowers purplish, on small oval spikes. July. On chalk hills, &c. *S. Brit.* *Curt.* ii. 64.

**QUERCUS.** *Male* flowers on a soft catkin. Calyx quinquefid or quadrid. Corolla o. Stamina 5—10. *Female* flowers sessile, in a bud. Calyx intire, hemispherical, rough. Corolla o. Style single. Seed oval, single.

1. *Robur.* *Oak.* Leaves oblong, broadest at the top, deeply sinuated, angles obtuse, deciduous. April.

**FAGUS.** *Male* flowers on a catkin: Calyx campanulate, quinquefid. Corolla o. Stamina about 12. *Females* in a bud: Calyx with 4 teeth. Corolla

rolla 0. Styles 3. Capsule with soft spines, and 4 valves. Seeds 2.

1. Castanea. *Chestnut Tree*. Large, diffuse. Leaves lance-shaped, pointed, sharp-ferrated, smooth beneath. May. In Kent frequent.
2. Sylvestica. *Beech*. Large tree. Bark smooth, white. Leaves oval, waved, scarce serrated. Catkin round. May.

CARPINUS. *Male* flowers on a cylindrical catkin. *Females* on an oblong catkin. Calyx a fringed scale. Corolla 0. Stamina 20. Styles 4. Fruit oval, angulated.

1. Betulus. *Hornbeam*. Bark smooth, white. Leaves oval, pointed, sharp-ferrated, nervous, smooth. May. *Ger.* 479.

CORYLUS. *Male*: Calyx a trifid scale, containing a single flower. Corolla 0. Stamina 8. *Female*: Calyx of 2 leaves, lacerated. Corolla 0. Styles 2. Nut oval. Male flowers on a long catkin, female sessile, in a bud.

1. Avellana. *Hazel-nut tree*. A tall shrub. Branched, downy. Leaves round, pointed, serrated, wrinkled, with two small, oval, obtuse stipulæ. March. *Ger.* 1438. 2.

## VII. MONA-

VII. MONADELPHIA.

Male flowers with one sett of united stamina.

PINUS. *Male* flowers in clusters: Calyx of 4 leaves. Corolla o. Stamina many. *Female*: Calyx the scale of a cone, containing two flowers. Corolla o. Pistillum single.

1. Sylvestris. *Scotch Fir*. Leaves bluish, short, two together, convex on one side, concave on the other. Cones pendulous, small, whitish. May. In the Highlands of Scotland. Ger. 1356. 1.



## C L A S S XXII.

## D I O E C I A.

Male and female flowers on separate plants.

## I. D I A N D R I A.

Male flowers with two stamina.

**SALIX.** *Male* : Calyx the scale of a catkin. Corolla o. A nectariferous gland in the center. *Female* : Calyx the same. Corolla o. Style very minute, bifid. Capsule unilocular, bivalve. Seeds numerous, downy.

\* *Leaves smooth, serrated.*

1. Hermaphroditica. *Shining Willow.* Flowers hermaphrodite. Branches pale red. Veins on the upper side of the leaf hollow. March. In moist hedges near Aston in Cumberland. S. Brit.
2. Pentandria. *Sweet Willow, or Bay leaved Willow.* Leaves odorous, on triangular vaginal foot-stalks, without auricles. Apr. On the mountains in the North.
3. Amygdalina. *Peach-leaved Willow.* Branches first green, then deep purple, brittle. Leaves 5 or 6 inches long, on foot-stalks, with small stipulæ. May.
4. Fragilis. *Crack Willow.* Leaves serrated, smooth, ovato-lanceolate; stalks with glandular

glandular teeth. A large tree : branches brittle at the joints. May.

5. *Purpurea. Red Willow.* A low tree. Twigs flexile, red. Leaves long, narrow, scarce serrated, with yellow nerves and foot-stalk, without stipulæ, somewhat downy beneath, alternate ; lower leaves opposite. April, May.
6. *Helix. Yellow Dwarf Willow.* Bark yellowish. Twigs angular, purple. Leaves bluish beneath, generally opposite. Catkin more compact, downy, with black scales. Capsules short, dense, downy. May. Not common. *Ger.* 1389.
7. *Herbacea. Mountain Dwarf Willow.* The least of all trees. Leaves orbicular, smooth, serrated, with yellow veins. Capsules large, purple, few. June. On the mountains in the North of England.  

\* \* *Leaves smooth, intire.*
8. *Reticulata. Oval-leaved Mountain Dwarf Willow.* A small shrub. Leaves almost round, somewhat hairy, above wrinkled, beneath whitish and reticulate ; veins first red, then green. On mountains. June.  

\* \* \* *Leaves intire, downy.*
9. *Aurita. Round-leaved Willow.* Leaves woolly on both sides, with auricles. May. In woods and hedges.
10. *Arenaria. Sand Willow.* Leaves oval, acute ; above downy, dark green ; beneath woolly. Female spike an inch long. June. On sandy ground.

11. Repens. *Creeping Willow*. Stem the thickness of a finger, creeping. Branches downy. Leaves lance-shaped, slightly hairy, or quite smooth; bluish beneath. Catkin lateral. Capsules reddish. May.
  12. Fusca. *Brown Willow*. Stem erect, a foot high; bark brown. Leaves narrow, villous, grey beneath. May, June.
  13. Rosmarini folio. *Rosemary-leaved Willow*. Leaves sessile, woolly beneath. May.
- \* \* \* \* *Leaves slightly serrated, downy.*
14. Caprea. *Common Sallow*. A moderate tree. Bark grey; rough. Leaves oval, wrinkled, woolly beneath, waved, some with and some without auricles. Catkin very thick. April, May.
  15. Viminalis. *Osier*. Branches dark, flexile, erect, long. Leaves very long, narrow, downy beneath, dark green above, with a yellow nerve. Female spikes sessile, with silver-downy capsules. April.
  16. Alba. *Common white Willow*. The tallest tree of this genus. Bark smooth and whitish. Leaves lance-shaped, pale green above, white beneath. Branches brittle. Apr.

## II. TRIANDRIA.

Male flowers with three stamina.

EMPETRUM. Calyx tripartite. Petals 3.  
Stamina long. Stigmata 9. Seeds 9,  
in a round berry.

1. Nigrum. *Black Crow, or Crake Berries*.  
A low weak shrub, much branched.  
Leaves

Leaves numerous, short; obtuse. Flowers green or reddish, in the axæ of the leaves. April, May. *Ger.* 1383. 9.

CAREX. For the generic character see *Monoecia Triandria*.

1. Dioeca. *Small Carex*. Spike single, simple, oblong. Culm and leaves slender, triangular. June. P. On bogs, &c. *Fl. dan.* 369.

VALERIANA. See *Triandria Monogynia*.

1. Dioica. *Small Wild or Marsh Valerian*. Root creeping. Stem striated, a foot high. Radical leaves single, oval; those above pinnated, intire. Flowers reddish white, in large tufts, terminal, and in the axæ of the leaves. June. P. In moist meadows. *Ger.* 1075. 3.

### III. TETRANDRIA.

Male flowers with four stamina.

VISCUM. *Male*: Calyx quadripartite. Corolla 0. Filaments 0. Antheræ adhering to the calyx. *Female*: Calyx of 4 leaves, above the germen. Style 0. Stigma obtuse. Corolla 0. Berry with one seed.

1. Album. *White Mistle, or Mistletoe*. A shrub, growing on the bark of several trees. Leaves conjugate, elliptical. Stem forked. Flowers whitish, in the axæ of the leaves. May. *Ger.* 1350, 1. *S. Brit.*

HIP-

HIPPOPHAE. *Male*: Calyx bipartite. Corolla o. *Female*: Calyx bifid. Corolla o. Style 1. Berry with 1 seed.

1. Rhamnoides. *Sallow-thorn*. Leaves lanceolate, scaly. *Male* flowers below the leaves; *female* sessile in the bosom of the lower leaves. A shrub 8 feet high; branches spreading, straight, stiff, sharp. April, May. *Fl. dan.* 265. WITH. S. Brit.

MYRICA. *Male*: *female*: Catkin; scales lunated. Corolla o. Styles 2. Berry with 1 seed.

1. Gale. *Sweet Willow Dutch Myrtle*. Shrub 3 feet. Leaves lanceolate, sub-ferrated. Buds of 9 shining scales. Smells like myrtle. *Ger.* 1228.

RHAMNUS. See *Pentandria Monogynia*.

1. Catharticus. *Buckthorn*. A tall shrub. Branches terminate in a spine. Leaves oval, pointed, ferrated. Flowers small, greenish, quadrifid. Berry round, black. *Ger.* 1337. 1.

URTICA. See *Monoecia Tetrandria*.

1. Dioica. *Common Nettle*. Stem square, firm, 3 or 4 feet high. Leaves heart-shaped, long-pointed, ferrated, beset with stings. Flowers in long catkins. July. P. In hedges, &c. *Fl. dan.* 746.

#### IV. PENTANDRIA.

Male flowers with five stamina.

HUMULUS. *Male*: Calyx of 5 leaves, oblong, obtuse. Corolla o. *Female*: Calyx of 1 leaf, oval, large, intire. Styles 2. Seed 1.

1. Lu-

1. *Lupulus. Hops.* A tall, slender, voluble shrub. Leaves lobed, serrated, somewhat resembling those of the vine. June. P. In hedges frequent. *Ger.* 885. 1.

PIMPINELLA. Vide *Pentandria Digynia*.

1. *Dioica. Least Burnet Saxifrage.* Umbels very numerous, compound, and simple. Stem 6 inches, with few leaves. Involucra 0. Flowers yellowish or white. *Ger.* 1021.
3. WITH. May, June. P.

## V. H E X A N D R I A.

Male flowers with six stamina.

TAMUS. Calyx of 6 segments. Corolla 0. Style trifid. Berry oval, trilocular. Seeds 2.

1. *Communis. Black Briony.* Root large. Stems several, long, slender, voluble. Leaves large, heart-shaped, glossy, dark green, on long foot-stalks. Flowers greenish. Berry red. June. In hedges. *Ger.* 871. S. Brit.

RUMEX. See *Hexandria Trigynia*.

1. *Acetosa. Common Sorrel.* Stem simple, above a foot high. Leaves oblong, arrow-shaped, acid, on reddish foot-stalks. Flowers small, reddish. June. In pastures. *Ger.* 396. 1.
2. *Acetosella. Sheep's Sorrel.* Stem 6 or 8 inches high. Leaves lance-shaped, generally hooked at the base. May—July. In pastures, &c. *Curt.* v. 29.

## VI. OCTANDRIA.

Male flowers with eight stamina.

POPULUS. Catkin oblong, loosely imbricated; scales lacerated at the edge. Filaments very short; antheræ large. Stigma quadrifid. Capsule bivalve, bilocular. Seeds numerous, downy.

1. Alba. *White Poplar*. A tall tree. Leaves large, dentato-angulated, white and woolly beneath. March. *Hunt. vel.* 208.
2. Tremula. *Trembling Poplar*, or *Asp.* Leaves roundish, smooth on both sides, on long foot-stalks, with a double gland at the base. March. *Ger.* 1487. 3.
3. Nigra. *Black Poplar*. Leaves rhomboidal, smooth, serrated, pointed, dark green, on yellow foot-stalks. March. Near rivers. *Ger.* 1468. 2.

RHODIOLA. Calyx quadripartite. Petals 4. Nectaria 4. Pistilla 4. Capsules 4. Seeds many.

1. Rosea. *Rosewort*. Root white, branched, smelling like a rose. Stem simple, erect, covered with leaves, which are elliptical, sharply serrated. Flowers small, yellow, in umbels, terminal. June, July. On the mountains in the north of England. *Ger.* 532.

## VII. EN-



## VII. ENNEANDRIA.

Male flowers with nine stamina.

MERCURIALIS. Calyx tripartite. Corolla 0. Stamina 9 or 12; antheræ double. Styles 2, reflex, cornuted. Capsule scrotiform, bilocular. Seeds single.

1. Perennis. *Dog's Mercury*. Stem simple, about a foot high. Leaves opposite, serrated, pointed, rough, harsh. Catkins erect. April, May. P. In hedges, &c. *Curt.* ii. 65.
2. Annuæ. *French Mercury*. Stalk branched, 2 feet high. Leaves opposite, oblong, pointed, serrated, smooth. Catkins erect. Oct. A. On waste ground frequent. *Curt.* v. 68.

HYDROCHARIS. *Male*: Spatha of two leaves, trifloral. Calyx trifid. Petals 3. Stamina in 3 sets. *Female*: Calyx trifid. Petals 3. Styles 6. Capsule flex-locular. Seeds numerous.

1. *Morus Ranæ*. *Frog-bit*, or *Small Water Lilly*. Leaves reniform, with their foot-stalk in the pelvis, thick, smooth, brown-green, an inch in breadth, swimming on the water. Flower white. June. In ditches frequent. *Curt.* iii. 64.

## VIII. DECANDRIA.

Male flowers with ten stamina.

CUCUBALUS. See *Decandria Trigynia*.

- I. Otites. *Spanish Campion*, or *Catchfly*. Stem two feet high. Radical leaves on broad foot-stalks, in a circle on the ground; those on the stem less, opposite, few. Flowers greenish; petals narrow, pointed, intire. July, Aug. In pastures, &c. *Ger.* 593. I.

LYCHNIS. See *Decandria Pentagynia*.

- I. Dioicia. *Red C. and White C.* Stem 3 feet high, hairy, branched, swollen at the joints. Leaves oval, sharp-pointed, hairy, waved. Flowers numerous, terminal, red in the male, generally white in the female plant. May—July. Woods and hedges frequent. *Curt.* ii. 32.

## IX. ICOSANDRIA.

Male flowers with twenty or more stamina, inserted in the calyx.

RUBUS. See *Icosandria Polyginia*.

- I. Chamæmorus. *Cloud Berry*. Stem simple, brown, scarce a foot high. Leaves simple, on long foot-stalks, large, lobed, indented, alternate, 4 or 5 in number. Flower single, purple, terminal. Fruit red, resembling a raspberry. May, Jun. On bogs in the North. *Lightf.* xiii. p. 286.

X. MO-

## X. MONADELPHIA.

Male flowers with one set of united stamina.

**JUNIPERUS.** *Male*: Calyx the scale of a catkin. Corolla 0. Stamina 3, *Female*: Calyx tripartite. Petals 3. Styles 3. Berry containing 3 seeds.

1. *Communis. Common juniper.* A shrub, or tree. Bark reddish. Leaves small, narrow, sharp-pointed, 3 together, numerous, concave and bluish beneath. May. On heaths, &c. *Ger.* 1372. 1.

**TAXUS.** Calyx the scales of a bud. Corolla 0. Stamina numerous. Style 0; stigma obtuse. Fruit a singular kind of berry, with a single seed, its apex prominent.

1. *Baccata. Yew-tree.* Bark reddish. Leaves deep green, long, narrow, close, as if pinnated, ever-green. Apr. May. *Hunt. eval.* p. 378. 1.

## XI. SYNGENESIA.

Male flowers with united antheræ.

**RUSCUS.** Calyx of 6 leaves. Corolla 0. Nectarium oval, large as the calyx, inflated, perforated. Filaments 0; antheræ three. Style single. Berry trilocular. Seeds two.

1. *Aculeatus. Knee Holly, or Butcher's Broom.* Stem near 2 feet high, tough, woody, branched, striated. Leaves numerous, dark-green, elliptical, very sharp-pointed, half

an inch long. Flowers on the back of the upper leaves, greenish. Berries red, large. March, Apr. In woods, heaths, &c. *Ger.* 907. *S. Brit.*

**BRYONIA.** Calyx campanulate, quinque-dentate. Corolla campanulate, quinque-partite. Filaments 3, very short. Style trifid. Berry oval, smooth. Seeds several.

1. *Alba.* *White Briony.* Root white, very large. Stem slender, angular, voluble, branched. Leaves palmated, or pentangular, with triangular lobes, serrated, hard and rough. Flowers whitish green, small, numerous. Berry red. May. In hedges, &c. *Ger.* 869.

**GNAPHALIUM.** See *Syngenesia Polygamia Superflua.*

1. *Dioicum.* *Mountain Cudweed, or Cat's Foot.* Stem simple, 4 or 5 inches long, with several creeping shoots. Leaves in thick tufts on the ground, oblong, pointed, indented, downy beneath. Flowers in clusters, terminal, white, or reddish. May. P. In dry mountainous pastures. *Lightf.* xx, p. 470.

C L A S S XXIII.

P O L Y G A M I A.

Flowers hermaphrodite, and also male or female flowers.

I. M O N O E C I A.

Polygamy on the same plant.

**HOLCUS.** *Hermaphrodite*: Calyx a husk, bivalve, rigid, beardless. Corolla a husk, tender, hairy, bearded, less than the calyx. Stamina 3. Styles 2. Seed 1. *Male*: Calyx a husk, bivalve. Stamina 3. Corolla 0.

1. *Lanatus. Meadow Soft-Grass.* Culm a foot and a half high. Leaves downy. Husk bifloral, downy; beard of the male curved. Panicle not diffuse. Jun. In meadows, &c. *Curt.* iv. ii.
2. *Mollis. Creeping Soft-Grass.* Culm procumbent. Leaves less downy, and panicle more diffuse than the last. *Curt.* v. 8.

ÆGILOPS. *Hermaphrodite*: Calyx a husk, cartilaginous. Corolla husk. Stamina 3. Styles 2. Seed 1. *Male*: Calyx, corolla and husk like the hermaphrodite.

- x. *Incurva. Sea Hard-Grass.* Culm 6 inches high.  
Spike very slender, cylindrical, beardless,  
jointed, smooth, curved. Calyx uni-  
U 4 floral.

floral. Valves of the corolla placed contrary to the calyx. July. A.

*Galium*

VALANTIA. Calyx o. Corolla quadripartite. Stamina 4. Style bifid. Seed 1.

1. Cruciata. *Crosswort*, or *Mugweed*. Stem in part procumbent, hairy. Leaves oval, pointed, hairy, 4 together. Flowers small, yellow, on short pedicles, in the axæ of the leaves, generally 8 on each pedicle. May, June. In hedges.

PARIETARIA. Calyx quadrifid. Corolla o. Stamina 4. Style 1. Seed 1. The hermaphrodite flowers two in each involucre, with a female between; Involucre of 6 leaves.

1. Officinalis. *Pellitory of the Wall*. Stems reddish, jointed, numerous, a foot high. Leaves numerous, alternate, ovato-lanceolate, hairy. Flowers small, greenish, in the axæ of the leaves. May—Sept. P. On walls, &c. *Curt.* iv. 63.

ATRIPLEX. *Hermaphrodite*: Calyx of 5 leaves. Corolla o. Stamina 5. Style bipartite. Seed 1. *Female*: Calyx of 2 leaves. Corolla o. Style bipartite. Seed 1.

1. Portulacoides. *Sea Purslane*. Stems procumbent, woody, purplish, hairy, a foot long. Leaves long, narrow, thick, whitish. Flowers sessile, greenish purple, on spikes. Aug. On the coast. *Ger.* 523. 2.

2. Laciniata. *Jagged Sea Orach*. Stem erect, cylindrical; leaves above alternate, deltoid, dentate, hoary beneath. Terminal spikes bear hermaphrodite flowers; lateral

ral spikes female. Calyx of the fruit quinquedentate. Aug. On the coast. Ger. 325. 4.

3. *Hastata*. *Wild Orach*. Female valves large, deltoide, sinuated. Leaves deltoide, hastate, sinuated. Flowers small, whitish, on long spikes. On waste ground, &c. Curt. ii. 66.
4. *Patula*. *Narrow leaved Orach*. Stem much branched, spreading. Leaves long, narrow, intire, pointed broadest at the base. Valves of the seed dentated. Flowers whitish, on spikes. On waste ground. Aug. Ger. 326. 7.
5. *Littoralis*. *Grass-leaved Orach*. Stem erect. Leaves very long, narrow, linear, intire. Aug. Sept. On the coast, and on waste ground. Pet. 7. 6.
6. *Pedunculata*. *Pediculated Sea Orach*. Stem forked, erect. Leaves launce-shaped, obtuse, intire. Female calyx on a long pedicle. Aug. Sept. A. On the coast. Pet. 7. 8.

ACER. *Hermaphrodite*: Calyx quinquefid. Corolla of 5 petals. Stamina 8. Pistillum 1. Capsules 2 or 3. Seed single, winged. *Male*: Calyx quinquefid. Corolla of 5 petals. Stamina 8.

1. *Pseudo-Platanus*. *Sycamore-tree*, or *greater Maple*. A tall tree. Leaves large, of 5 lobes, irregularly ferrated, whitish beneath. Flowers yellowish green, in clusters. May, June. Hunt. eval. p. 193.
2. *Campestre*. *Common Maple*. A small tree. Bark rough, furrowed. Leaves lobed, notched,



notched, smooth on both sides. Flowers in clusters, on conjugate pedicles, terminal. May, June. In hedges. *ib.*

## II. D I O E C I A.

Polygamy on separate plants.

FRAXINUS. Calyx quadripartite, oro.  
Corolla o. Stamina 2. Pistillum 1.  
Seed 1.

1. Excelsior. *Ash-tree*. Leaves pinnated, serrated. March, April. *Hunt. eval. p.* 145.

CLASS

## CLASS XXVI.

## CRYPTOGAMIA.

Frustrification concealed.

I. FILICES, *Ferns.*

Fruit generally on the back of the leaf.

**EQUISETUM.** Frustrifications terminal, peltate, orbicular, of many valves, bursting at the base, arranged in ovato-oblong spikes. Stem and leaves composed of tubes inserted into each other at the joints.

1. *Sylvaticum.* *Wood Horsetail.* Stem near 2 feet high, spicate. Leaves, or rather bristles, very slender, and numerous, with 8 or 10 whirls on each. April, May. P. In woods, &c. *Ger.* 1114. 5.
2. *Arvense.* *Corn Horsetail.* Proliferous stems, without leaves; those on the rest long and angular. Apr. P. In wet corn-fields. *Curt.* iv. 64.
3. *Palustre.* *Marsh Horsetail.* Stem a foot high, with 4 or 5 deep furrows, so as to seem angular. Leaves long, simple, often consisting of 10 or 12 joints. Spikes brown. June. P. *Ger.* 1114. 4.
4. *Fluviatile.* *River Horsetail.* Stem striated, 3 or 4 feet high, an inch in diameter. Bristles very

very numerous, generally simple, about 20 in each whirl, deeply furrowed. May. P. On the banks of lakes and rivers. *Ger.* 1113. 1.

5. *Limosum*. *Smooth Horsetail*. Stem smooth, a foot and half high, naked in the spring, but afterwards producing 12 to 18 leaves. June. P. In fens, &c. *Ray. Syn. p.* 131.
6. *Hyemale*. *Rough Horsetail*, or *Shave-grass*. Stem 2 to 3 feet high, without leaves or branches, furrowed, terminated by a brown spike. It has sometimes a branch or two at the bottom. July, Aug. P. In fens, &c. *Ger.* 1113. 2.

OPHIOGLOSSUM. Spike jointed, distich; joints bursting transversely.

1. *Vulgatum*. *Adder's Tongue*. A single leaf, oval, thick, without rib, or veins, on a foot-stalk 4 inches long. Spike an inch or more in length, extremely slender, on a pedicle. May. P. In meadows, &c. *Ger.* 404. 1. 2.

OSMUNDA. Spike branched. Capsules globose, distinct, opening horizontally, collected in clusters. Seeds numerous.

1. *Lunaria*. *Moonwort*. A single, radical, pinnated leaf, near 2 inches long, on a foot-stalk of 4 inches or more; pinnæ lunated, 5 or 6 pair. From the insertion grows a short stalk, with many pedicles, covered with yellowish capsules. May. In mountainous pastures, &c. *Ger.* 405. 2.
2. *Regalis*. *Flowering Fern*, or *Osmund Royal*. Root fibrous, implicated, blackish. Stems several, 4 feet high, bipinnated, not dentated.

tated. Capsules numerous, on bushy, terminal ramifications. July, Aug. P. On bogs. *Ger.* 1331.

3. Spicans. *Rough Spleenwort*. Leaves several, lance-shaped, reclining, pinnatifid; segments intire, parallel. Seeds on the middle leaves only, which are more erect, brown, with two reddish lines parallel to the middle rib. *Curt.* ii. 67.
4. Crispa. *Stone Fern*. Leaves supradecomposite; pinnæ alternate, first deeply notched, afterwards intire. On the under side two yellow lines parallel to the middle rib. Some leaves without seeds. Aug. Among rocks in the North. *Fl. dan.* 496.

#### ACROSTICUM. Fruifications covering the entire disk of the leaf.

1. Septentrionale. *Horned, or forked, or naked Fern*. Leaf simply divided, naked, linear, lacinated and curved at the top, 3 inches high, numerous. Aug. P. In the fissures of rocks in Wales, &c. *Ger.* 1561. 8.
2. Ilvense. *Hairy Fern*. Leaf sub-bipinnated; pinnulæ opposite, united, hairy beneath, about 3 inches long. In the fissures of rocks in Wales. *Fl. dan.* 391.

#### PTERIS. Seeds in lines near and parallel to the margin of the leaf.

1. Aquilina. *Female Fern, or Brakes*. Leaf 3 or 4 feet high, supradecomposite: Foliole pinnated; pinnæ lance-shaped, obtuse, entire. Aug. P. In woods, on commons. *Ger.* 1128. 2.

ASPLE-

ASPLENIUM. Seeds in right lines, converging towards the middle.

1. Scolopendrium. *Hart's-tongue*. Leaves numerous, near a foot long, simple, pointed, heart-shaped at the base, intire; stalk hairy. Among stones, &c. *Curt.* i. 67.
2. Ceterach. *Spleenwort*. Leaf 4 inches high, without stalk, pinnatifid; lobes alternate, confluent, harsh, pale green, rusty on the back. On old walls, fissures of rocks, &c. *Ger.* 1140.

\* *Leaves pinnated.*

3. Trichomanoides. *Common Maiden-hair*. Root black, fibrous. Stem glossy, black. Leaves 6 inches high, pinnated, numerous; pinnæ roundish, notched. Rows of seed 3—5. On old walls, &c. frequent. *Ger.* 1146. 1.
4. Viride. *Green-ribbed Maiden-hair*. Leaves pinnated, pinnæ roundish, truncated at the base. *Huds.*
5. Marinum. *Sea Maiden-hair*, or *Fern*. Leaves 3 inches high, pinnated; pinnæ obliquely triangular, serrated; stalk shining, blackish. On rocks on the coast. *Ger.* 1143. 4.

\* \*. *Leaves decomposite:*

6. Ruta-muraria. *White Maiden hair*. Leaves two inches high, alternately decomposite; pinnulæ rhomboidal, obtuse, notched. Rows of seed 2 or 3. In the fissures of rocks. *Ger.* 1144. 3.
7. Adiantum-nigrum. *Black Maiden-hair*. Stem black, glossy. First branches long, gradually

dually decreasing to a point, generally with 3 pair of pinnæ, alternate; pinnulæ oval, ferrated, deep green above. Seeds white, in 3—7 rows. *Ger.* 1137. 1.

POLYPODIUM. Seeds in roundish spots, disposed in lines on the disk of the leaf, parallel to the nerve.

\* *Leaf pinnatifid, lobes united.*

1. Vulgare. *Common Polypody*. Leaves a foot high. Root long, a finger thick, hairy. Pinnæ lance-shaped, intire, or slightly ferrated, gradually lessening to the top. Seed-spots yellow, in rows parallel to the rib. At the roots of trees, &c. *Curt.* i. 68.
2. Cambricum. \**Jagged Polypody*. Leaves pinnatifid: pinnæ lance-shaped, jagged. In a wood near Caerdiff, Glamorganshire. *Lightf.* calls it a variety.

\* \* *Leaves pinnated.*

3. Lonchitis. *Great Polypody*, or *Spleenwort*. Stem brown, chaffy. Pinnæ lunated, fringed, ferrated, with appendages ending in a spine. The whole habit harsh and rough. Seed-spots 12 pair or more. In fissures of rocks, &c. *Ger.* 1140. 3.

\* \* \* *Leaves sub-bipinnated.*

4. Phegopteris. *Wood P.* A foot high. Lower branches bending backward. Pinnulæ intire, sharp-pointed, nervous; those at the ends of the branches are confluent, irregular,

irregular, long. Among stones in the northern counties. *H. ox.* 575.

5. *Fragrans*. *Sweet P.* Stem scaly. Leaf lance-shaped, dense; lobes obtuse, serrated. Near Keswick in Westmoreland. S. Br.
6. *Fontanum*. *Rock P.* or *least stone Fern*. About 4 inches high. Stem whitish, smooth, hard, firm. Pinnæ few, middle ones longest; pinnulæ roundish, bidentate, tridentate. In the fissures of rocks, &c.
7. *Cristatum*. *Crested P.* Pinnæ ovato-oblong; pinnulæ obtuse, sharp-serrated. Seeds on the upper pinnæ only. In woods, &c. *H. ox.* 3; 14. 3.

\* \* \* \* *Leaves bipinnated.*

8. *Felix-mas*. *Male P.* or *Fern*. A foot and half high. Stem scaly. Pinnæ numerous, regular, alternate, gradually less. Pinnulæ obtuse, notched. Seed-spots 6 or 7. In woods, heaths, &c. *H. ox.* 14. 3. 6.
9. *Felix-femina*. *Female P.* Pinnulæ lance-shaped, distant, pinnatifid, acute. Seed-spots 5 or 6 pair. Segments serrated. In fens, &c. *H. ox.* 3. p. 579.
10. *Thelypteris*. *Marsh P.* Leaf sub-bipinnated; pinnæ pinnatifid, entire. Stem about 10 inches, a little scaly when young. In the old plants the under side of the lobes are covered with brown capsules as in the genus *acrosticum*. In boggy grounds. LIGHTF.
11. *Aculeatum*. *Prickl P.* Stem scaly. Pinnulæ lunated, fringed, dentated, auriculated, spinous.



spinous. Seed-spots 12 pair or more.  
In woods, &c. *H. ox.* 14. 3. 15.

12. *Rhæticum*. *Stone P.* Pinnæ and pinnulæ remote; the latter lance shaped, bifid, acute, hard, brittle. Angles of the pinnæ &c. all acute. On craggy mountains in the northern counties. *Park.* 1043. S. Brit.

13. *Fragile*. *Brittle P.* Height 6 inches. Pinnæ remote; pinnulæ roundish, lobed, serrated. Seed-spots large, blackish, numerous. Among stones, &c. *Fl. dan.* 401.

\*\*\*\*\* *Leaves supradecomposite.*

14. *Dryopteris*. *Branched P.* A foot high. Pinnæ 3 together, bipinnated; pinnulæ intire. Among rocks, &c. *Ger.* 1135. 3.

ADIANTUM. Seeds in oval spots, in the curled extremities of the leaves.

1. *Capillus Veneris*. *True Maiden hair*. Six inches high. Leaves decomposite. Pinnæ alternate; pinnulæ wedge-shaped, lobed, on pedicles. On rocks. On Barry-Island, Glamorganshire. *Ger.* 1143. 1.

TRICHOMANES. Calyx turbinated, single, terminated by a style like a bristle, on the very edge of the leaf.

1. *Pixidiferum*. *Cup T.* Leaves short, procumbent, pellucid, sub-bipinnated; pinnulæ alternate, close, lobed, linear. Among stones in wet ground. S. Brit.

2. *Tunbrigense*. *Tunbridge T.* Leaves short, procumbent, pellucid, pinnated; pinnulæ oblong, dichotomous, decurrent, dented.

ted. Seed-globules between two valves. In the fissures of moist rocks in Wales, &c. Aug. P. *H. ox.* 15. 7. f. 50.

PILULARIA. *Male* flowers in a line, like dust, on the under side of the leaf. *Females*, at the root, globular, quadrilocular, containing many seeds.

1. Globulifera. *Pepper Grass*. Roots creeping. Leaves like rushes, 3 or 4 inches long. Capsules like pepper-corns. June—Oct. In marshy ground. Hounslow-heath, &c. *Fl. dan.* 223.

ISOETES. *Male*: antheræ at the base of the inner leaves. *Female*: capsule bilocular, at the base of the external leaves. Seeds numerous.

1. Lacustris. *Quillwort*. Leaves jointed, semicylindrical, taper, pointed. At the bottom of lakes on mountains in Wales, &c. *Dillin.* 1. 80. 2.

## II. MUSCI, *Mosses*.

Antheræ without filaments. Female flowers distinct, without pistillum. Seed a naked corculum.

LYCOPODIUM. *Club-moss*. Antheræ bivalve, sessile. Calyptra 0.

1. Clavatum. *Common C.* Stem creeping, branched. Leaves irregular, like threads or hairs. Spikes cylindrical, double, on a scaly pedicle. July. On heaths, &c. *Ger.* 1562. 11.

2. Sela-

2. *Selaginoides*. *Prickly C.* Stem procumbent. Branches 2 or 3 inches long, erect. Leaves narrow, irregularly disposed, concave, fringed, acute. Spikes single, terminal, leafy. On the hills in the northern counties. Aug. *Fl. dan.* 76.
3. *Inundatum*. *Marsh C.* Stem creeping. Leaves irregular, intire. Spikes terminal, single, leafy, erect. July. On wet heaths frequent. *Fl. dan.* 336.
4. *Selago*. *Fir C.* Stem erect, forked, flat at the top, resembling a branch of the fir-tree. Leaves irregular, numerous, deep green. Antheræ dispersed in the alæ of the leaves. Aug. On mountains in Wales, &c. *Fl. dan.* 104.
5. *Annotinum*. *Welsh C.* Stem creeping. Branches erect. Leaves irregular, 5 together, slightly serrated, resembling those of the Juniper, reflex. Spikes erect, smooth, terminal, single, without pedicle. July. *Fl. dan.* 127.
6. *Alpinum*. *Mountain C.* Stem long, creeping. Branches numerous, two inches long, square. Leaves, in quadruple order, oval, concave, acute, hard. Spikes sessile, cylindrical. Yellow when full grown. Aug. Sept. *Fl. dan.* 79.

SPHAGNUM. Antheræ globose; mouth intire, closed by an operculum or cover. Calyptra, or veil, o.

1. *Palustre*. *Grey Bog Moss*. Spreads in large tufts, soft. Branches numerous, short, conic, reflex, pendulous. Leaves imbricated, close, concave, triangular, obtuse, white,

sometimes reddish. Antheræ brown, oval, on short pedicles. July, Aug. *Fl. dan.* 474.

2. *Alpinum. Green Bog Moss.* Very green. Branches subulate, erect. Antheræ oval, On bogs on mountains. *Dill. m.* 245. S. Brit.
3. *Arboreum. Creeping Bog Moss.* Branched. Antheræ numerous, sessile, hairy, along the branches, chiefly on one side. Nov. Dec. On the trunks of trees, &c.

PHASCUM. Operculum o. Cilix o. Calyptra minute.

1. *Acaulon. Oval Phascum.* Without stalk. Antheræ sessile. Leaves oval, imbricated, congested in the form of a bulb. Jan. Feb. On ditch-banks, &c. *Curt.* iv. 66.
2. *Subulatum. Subulated Phascum.* Without stalk. Exterior leaves fine green, plane, not pointed, spread upon the ground: interior leaves triangular, pallid, ending in a brown hair. Antheræ sessile, oval, very large, brown. March, Apr. On heaths, &c. *Curt.* iv. 67.
3. *Repens. Creeping Phascum.* Stem creeping, vermicular. Antheræ small, in the axæ of the leaves. Leaves imbricated. On the trunks of trees in Yorkshire. S. Br.

FONTINALIS. *Water Moss.* Antheræ with a pointed cover; mouth fringed. Calyptra smooth, sessile, conic, inclosed in an imbricated perichætium.

I. Anti-

1. Antipyretica. *Greater W. M.* Stem purplish. Leaves complicated, pointing 3 ways, concave on the outside, ending in a pile. Antheræ minute, lateral, in the alæ of the leaves. May. In flow rivers, &c: *Dill. m. 33. 1.*
2. Minor. *Less W. M.* Differs from the last in being less, and the antheræ terminal. Sept. Oct. On the banks of the Thames near London. *ib. 33. 2.*
3. Squamosa. *Scaly W. M.* Leaves imbricated, slender, pointed, silky, shining dark-green. Antheræ lateral. Aug. Sept. In rivulets in Wales. *ib. 33. 3.*
4. Pinnata. *Feathered W. M.* Branched. Leaves crisp, feathered, undulated, pointing two ways. Antheræ lateral, red-yellow. Aug. Sept. On trees.

SPLACHNUM. Antheræ cylindrical, on a large coloured receptacle. Calyptra conic, caducous. Female star on a separate stem, with several short coloured pistilla.

1. Ampullaceum. *Common Splachnum.* Leaves pellucid, resembling those of Thyme. Antheræ erect, in pairs. Apr. On bogs. *Dill. m. 44. 3.*
2. Vasculosum. *Accorn S.* Filaments orange, and capsules dark-red. LIGHTF.

POLYTRICUM. Antheræ with a cover, on a small receptacle. Calyptra downy. Female star on a separate stem.

1. Commune. *Common P.* Stem erect, simple. Leaves like those of Juniper, hard and sharp-

sharp-pointed. Calyptra yellow, large, conic, double. Antheræ paralleliped. P. May. On barren heaths. *Dill. m.* 54. 1.

2. Subrotundum. *Dwarf P.* Stem one-fourth to one-half an inch, generally simple. Leaves linear, obtuse, thick, rigid, serrated, dark-green. Filament reddish, 1 inch high; antheræ sub-cylindrical; pollen-green. Dec.—Feb. *Curt. ii.* 68.
3. Alpinum. *Alpine P.* Stem much branched. Antheræ elliptical, terminal. On mountains in Wales, &c. June, July. *Dill.* 55. 4.
4. Urnigerum. *Branched P.* Antheræ on pedicles, in the alæ of the leaves. June, July. *Dill.* 55. 5.
5. Striatum. *Striated P.* Stem branched, from half an inch to two inches, covered with lanceolate, acute, striated leaves. Filaments very short; antheræ erect, oval; operculum yellow, pointed. Mar. *Dill.* 55. 8. 9. 10. LIGHTF.

MNIUM. *Male*: antheræ, on a radical pedicle, with a cover; calyptra smooth, oblong, oblique, pointed. *Female*: a naked bulb, without calyptra or cover, often on a different stem.

1. Pellucidum. *Transparent Mnium.* Stems simple, some erect. Leaves oval, pointed, sessile, strong green, pellucid. Bristle from the apex an inch long. Calyptra erect, yellow above, very white below. operculum conic. Apr. On the trunks of old trees, &c. June. *Dill.* 31. 2.
2. Palustre.

2. Palustre. *Marsh Mnium*. Stem purplish, mealy, forked. Leaves spreading, triangular, carinated. Female bristles numerous, yellow. Male bristles one inch and a half long, purplish. Calyptra slender, yellowish. June, July. On marshy ground. *Dill.* 31. 3.
3. Androgynum. *Upright Mnium*, or *cluster-headed Goldilocks*. Stem branched, androgynous, naked below. Leaves small, narrow, in tufts, terminal. Calyptra white. Apr. In woods, &c. *Dill.* 31. 1.
4. Fontanum. *Fountain M.* Stem red, 4 or 5 inches, branched. Leaves one-twelfth of an inch, lanceolate, acute, white-green. Filaments 2 inches, red; antheræ greenish. On the verge of cold springs. June, July. *Dill.* 44. 2. LIGHTF.
5. Hygrometricum. *Yellow-bulbed M.* Stem o. Antheræ nodding; calyptra reflex, tetragonal. Leaves ovato-acute, conniving in the form of a scaly bulb. Filaments reflexed and twisted in moist weather. *Dill.* 52. 75. LIGHTF.
6. Annotinum. *Lancet leaved M.* Stems 1 inch. Leaves pellucid, intire, divided by a nerve, alternate, distant. Filament 1 inch, red. Antheræ pendulous, oval. *Dill.* 50. 68. LIGHTF.
7. Hornum. *Swan's Neck M.* Stems from 1 to 2 inches, generally simple. Leaves one-sixth of an inch, lanceolate, acute, pellucid, divided by a nerve, finely serrated. Filament 1 to 2 inches, tawny,  
X 4 from



from the summit of the stem, finally curved. *Dill.* 50. 68. *Curt.* i. 71.

8. *Crudum*. *Spear-leaved M.* Stem red, half an inch. Leaves alternate, pale green, tender, pellucid, intire. Filaments terminal, half an inch, pale red. *Dill. m.* 51. 70. *LIGHTF.*
9. *Serpyllifolium*. *Thyme-leaved M.* Stems long, prostrate, creeping. Leaves alternate, distant, oval, fine green, with a red nerve and margin. Filaments or single, or 2, or 3, or 4. *Dill.* 53. 81. *LIGHTF.*
10. *Triquetrum*. *Pendulous M.* Stem 1 to 3 inches. Leaves trifarious, lanceolate, acute, carinated, intire. *Dill.* 51. 72. 73.
11. *Tricomane*. *Fern M.* Leaves distich, intire. Feb. March. *Dill.* 31. 5.
12. *Fissum*. *Forked M.* Stem creeping. Leaves roundish, bifid, otherwise like the last. Mar. Apr. In shady places. *Dill.* 31. 6.
13. *Jungermania*. *Purple M.* Stem simple, procumbent. Leaves imbricated, alternate, intire, appendiculate, distich. On mountains and in rivulets. *Jungermania purpurea* of *Lightf.*

BRYUM. Antheræ with a conic cover. Calyptra smooth. Filament or pedicle from the central or terminal tubercle of the stem or branch.

\* *Antheræ sessile.*

1. *Apocarpium*. *Hairy B.* Branched. Leaves imbricated, deep green, terminating in a hair. Antheræ dark red, sessile. Dec. On

On stones and trees in the North.  
*Dill.* 32 4. 5.

\*\* *Antheræ on pedicles, erect.*

2. Pomiforme. *Round headed B.* Stems not quite an inch long, in thick tufts. Leaves generally pale, undulated, slender. Pedicle from the summit, reddish. Antheræ spherical, sulcated, brown, with a red cover. Mar. On Hampstead heath, &c. *Dill.* 44. 1.
3. Pyriforme. *Pear-headed B.* Leaves pale yellow, carinated, sessile, pellucid, broad. Antheræ turgid. Calyptra with a long horn. Mar. Common. *Dill.* 44. 6.
4. Extinctorium. *Conic B.* Stem an inch long. Leaves capillary, hooked. Antheræ erect, oblong. Calyptra loose, shaped like an extinguisher. *Dill.* 45. 8.
5. Subulatum. *Subulated B.* Branched from the root, without stems. Leaves capillary, pellucid. Antheræ erect, long, subulate, curved. Calyptra brown. In woods, &c. *Dill.* 45. 10. *Curt.* iii. 60.
6. Rurale. *Grey B.* Erect. Leaves recurved, with a grey hair at the apex. Antheræ long, acute, curved like a bird's claw. Mar. On walls, &c. *Dill.* 45. 12.
7. Murale. *Wall B.* Differs from the last only in being less, and the leaves and bill less curved. Mar. On walls, &c. *Dill.* 45. 14.
8. Barbatum. *Bearded B.* CURT. Stems half an inch, erect, leafy. Leaves dense, lanceolate, pointed. Filaments (half an inch) from the bottom or middle of the furculus.

- furculus, red, shining. Ciliae scarlet twisted. *Curt.* iv. 65.
9. Scoparium. *Broom B.* Stems reclining. Leaves subulate, curved, on one side. Antheræ almost erect; pedicles aggregated. Mar. Apr. On old trees, heaths, &c. *Curt.* i. 69.
10. Undulatum. *Curled B.* Leaves lance-shaped, carinated, undulated, spreading, serrated. Antheræ a little curved, reddish. Dec. Jan. *Curt.* i. 70.
11. Glaucum. *White B.* Branched. Leaves erect, imbricated, numerous. Antheræ a little curved, on very short pedicles. Operculum arched. Oct. Nov. On moors. *Dill.* 46. 20.
12. Pellucidum. *Pellucid B.* Stalk hairy, branched. Leaves pellucid, slender, curved, acute. Antheræ not quite erect. On bogs, &c. *Dill.* 46. 23.
13. Aciculare. *Mountain B.* Leaves fine green, erect, chiefly turned to one side. Antheræ erect, cylindrical. Bristles yellow. Calyptra very acute. Operculum long, like a needle. Aug. On mountains in Wales, and North of England. *Dill.* 46. 25.
14. Flexuosum. *Soft B.* Leaves like hair. Pedicles twisted. Antheræ erect. On rocks near Llanberris. *Dill.* 47. 33.
15. Heteromallum. *Heath B.* Leaves like hair, turned one way. Antheræ erect. *Dill.* 47. 37.
16. Laterale. *Lateral B.* Stem 1 inch, erect. Leaves capillary, reclining, numerous, soft.

soft. Peduncles very short, red; antheræ erect, lateral; capsule erect, large, short, brown. *Fl. dan.* 538. 3. LIGHTF.

17. Tortuosum. *Twisted B.* Leaves long, narrow, curled, yellow when old. Pedicles, from the extremity of the stem, purplish, an inch long. Antheræ erect, almost cylindrical; operculum crested, with a few red hairs. *Dill.* 48. 40.
18. Cirratum. *Star topped frizzled B.* *Mnium* of *Lin.* and *Huds.* Differ very little from the preceding, except in being less.
19. Setaceum. *Pale star-topped B.* *Mnium* of *Lin.* and *Huds.* Stems half an inch, branched at top. Leaves in a star at the top of the branches. Antheræ erect; operculum filiform, length of the antheræ. *Dill.* 48. 44. LIGHTF.
20. Truncatum. *Brown B.* One of the least. Stems numerous, very short. Leaves narrow, taper, curled. Pedicles, from the center of the tufts, yellow. Antheræ erect, red, much truncated when without its cap. On ditch-banks, &c. Feb. *Curt.* ii. 70.
21. Viridulum. *Green B.* Differs from the last in being of a finer green. Antheræ oval, yellow, and fringed. Dec. Jan. Hedge-bottoms, &c. *Curt.* ii. 71.
22. Paludosum. *Dwarf B.* Among the least. Without stalk. Leaves narrow, taper. Antheræ very obtuse, spreading, brown, on very short pedicles. Mar. On bogs, &c. *Dill.* 49, 53.

23. Hyp-

23. Hypnoides. *Woolly B.* Stem not quite erect. Lateral branches short. Leaves acute, carinated, woolly. Antheræ, on short lateral pedicles, erect, but soon pendulous, oval. Dec. On mountains in Wales, and in the North. *Dill.* 47. 32.
24. Verticillatum. *Verticillated B.* Antheræ erect. Pedicles twisted when dry. Leaves hairy. On mountains. *Dill.* 47. 34.
25. Æstivum. *Water B.* Leaves subulate, distant. Antheræ erect, roundish, from the alæ. March. In fens.
26. Purpurium. *Purple B.* *Mnium* of *Lin.* and *Huds.* Stems erect, near 1 inch. Leaves subulate, patent, in stars at the top of the branches. Peduncles numerous, erect, 1 inch, bright red. Capsule, operculum and calyptera, red. *Dill.* 49. 51.

\* \* \* *Antheræ pendulous.*

27. Argenteum. *Silver B.* Stems cylindrical, imbricated, smooth, silvery. Leaves minute, numerous, triangular, compact. Antheræ short, oval, blackish. Operculum short, conic. Dec. On walls, &c. *Curt.* iii. 67.
28. Pulvinatum. *Grey B.* Leaves hairy. Antheræ roundish, pendulous, on short pedicles. Apr. On walls. *Dill.* 50. 65.
29. Cespiticium. *Matted B.* Leaves subulate, bristly. Antheræ pendulous, small; pedicle very long, red below, green yellow above. On walls, &c. March. *Curt.* iii. 67.

30. Capil-

30. Capillare. *Capillary B.* Differs from the last in the antheræ being somewhat larger, and the leaves broader and more compact. *Dill*, 50. 67.
31. Carneum. *Shining B.* Leaves acute, pellucid, alternate. Antheræ roundish, pendulous, pale red. Mar. On wet ground.
32. Simplex. *Red B.* Stem simple. Leaves subulate. Anthera oblong, pendulous, on a pedicle from the middle of the stem. Among grasses, but rare.
33. Alpinum. *Red Alpine B.* Stems one inch and half. The entire plant dark red. Anthera oblong, pendulous. Leaves oval, pointed, carinated. *Dill*. 50. 64.

HYPNUM. Calyptra smooth. Anthera, with an operculum or cover, on a pedicle, from a lateral perichætium or scaly bulb. Stem generally procumbent, with many branches. *Female*: a single pistillum, from the alæ of the leaves.

\* *Leaf pinnated.*

1. Taxifolium. *Yew-leaved H.* Leaf simple, pinnated, lance-shaped. Pedicle from the root. Antheræ roundish, erect Feb. In hedge bottoms, &c. *Dill*. 34. 2.
2. Denticulatum. *Feathered H.* Leaf simple, pinnated; pinnæ duplicate, curved. Pedicle from the root. Apr. In woods, &c. *Dill*. 34. 5.
3. Bryoides. *Fern H.* Leaf simple, pinnated, lance-shaped. Pedicle from the apex of the stalk. Feb. *Dill*. 34. 1.
4. Adian-

4. *Adiantoides*. *Upright H.* Leaf pinnated, branched, erect. Pedicle from the middle. Pinnulæ acute. Mar. On bogs. *Dill.* 34. 3.
5. *Complanatum*. *Flat H.* Leaf pinnated, branched; pinnæ acute, imbricated, complicated, compressed, glossy. Antheræ oval. March, April. On trees. *Dill.* 34. 7.

\* \* *Stems straggling.*

6. *Lucens*. *Shining H.* Stems branched. Leaves sub-pinnated, large, glossy, punctured. Mar. In shady wet places. *Dill.* 34. 10.
7. *Undulatum*. *Waved H.* Stem branched, 5 or 6 inches long. Branches few, irregular. Leaves sub-pinnated, narrow, waved, glossy. Bulb long, loose. Pedicle scarce an inch. Calyptra long, with a yellow apex. Operculum with a long horn. In woods. *Dill.* 36. 1.
8. *Crispum*. *Curled H.* Branched. Leaves sub-pinnated; pinnæ undulated, curled. Pedicle and anthera short. Among stones. *Dill.* 36. 12.
9. *Triquetrum*. *Triangular H.* Branches unequal, curved. Leaves triangular, spreading, recurved, pointed, large, pale. Feb. In woods, &c. *Dill.* 38. 28.
10. *Rutabulum*. *Toothed H.* Branches irregular. Leaves oval, imbricated, pointed. Calyptra long, shining. Operculum obtuse. Dec. In woods, heaths, &c. *Dill.* 38. 29.

\* \* \* *Stems*



\*\*\* *Stems pinnated.*

11. *Filicinum. Bog H.* Stem creeping. Branches distant. Leaves imbricated, incurved, acute, turned to one side. Mar. On bogs. *Dill.* 36. 19.
12. *Parietinum. Wall H.* Stem creeping, naked or close covered with leaves. First branches few, alternate; second branches opposite, in the same plane, like Fern, and pinnated. Pinnulæ minute, acute, fine green, glossy. Bulbs numerous. Pedicles aggregate, 2 inches long, purple waved. Calyptra yellow, shining. Operculum with a long bill. Feb. On heaths, &c. *Dill.* 35. 13.
13. *Proliferum. Proliferous H.* Differs only from the last in being less, and the leaves not glossy. *Curt.* i. 72.
14. *Prælongum. Trailing H.* Stems sub bipinnated, decumbent, long. Branches remote. Leaves oval, small, curled. Antheræ drooping. Feb. Mar. On old trees, &c. *Dill.* 35. 15.
15. *Crista Castrensis. Crested H.* Pinnated. Branches approximate, curved at the apex, yellowish. Feb. On chalk-hills. *Dill.* 36. 20.
16. *Abietinum. Fir H.* Branches pinnated, roundish, remote, unequal, subulate, tenacious, yellowish. Pedicles single, purple, strait. Calyptra erect, subulate, pallid. Anthera brown, much curved. On hills in Oxfordshire. *S. Brit.*
17. *Plumosum. Winged H.* Creeping, pinnated. Branches approximate. Leaves imbricated.

cated, subulate; antheræ erect. Feb.  
On walls, trees, &c. S. Brit.

\*\*\*\* *Leaves reflex.*

18. Cupressiforme. *Cypress H.* Creeping, sub-pinnated. Leaves sharp-pointed, curved, turned all one way. Feb. On old trees, &c. *Dill.* 37. 23.
19. Aduncum. *Hooked H.* Erect, branched. Leaves like the last. Branches curved at the top. May. On bogs. *Dill.* 37. 26.
20. Scorpoides. *Scorpion H.* Branches irregular, procumbent, curved. Leaves like the two last. On bogs. *Dill.* 37. 25.
21. Viticulosum. *Mountain H.* Creeping. Branches irregular, cylindrical. Leaves spreading, pointed. Antheræ cylindrical. March. On heaths, &c. *Dill.* 39. 43.
22. Squarrosus. *Common H.* Branches irregular. Leaves oval, sharp-pointed, reflex. Apr. In wet meadows. *Dill.* 39. 38.
23. Lorcum. *Ground H.* Stem creeping. Branches irregular, erect. Leaves turned one way. Antheræ roundish, with a large operculum. On hills. S. Brit.

\*\*\*\*\* *Bushy, or fasciculate.*

24. Denroides. *Tree H.* Stem erect, two inches high, bushy at the top. Leaves narrow, concave, close to the stem, yellowish, shining. Antheræ erect. Mar. *Dill.* 40. 48.
25. Aleopecurum. *Fox tail H.* Differs from the last in the branches being more slender,  
and

and sub-divided, and the antheræ drooping. Apr. In woods, &c. *Dill.* 41. 49.

\*\*\*\*\* *Cylindrical.*

26. *Curtipendulum.* *Pendulous H.* Stems straggling. Leaves oval, acute, spreading. Antheræ pendulous, on short pedicles. Feb. On the roots of trees, &c. S. Br.

27. *Purum.* *Meadow H.* Stems straggling. Leaves oval, obtuse, imbricated. Antheræ oblique. Feb. In woods, pastures, &c. *Curt.* iii. 65.

28. *Illecebrum.* *Geniculated H.* Stem and branches irregular, cylindrical, not quite erect, obtuse. Leaves roundish, imbricated, whitish. Mar. Apr. On heaths. S. Br.

29. *Riparium.* *Floating H.* Branched, pinnated, floating. Leaves acute, spreading, distant. Dec. Jan. On the banks of rivers. *Dill.* 40. 44.

30. *Cuspidatum.* *Pointed H.* Stems irregular, creeping, pointed, and pungent. Leaves triangular, spreading, but convoluted at the apex. March, Apr. *Dill.* 39. 34.

\*\*\*\*\* *Branches numerous, crowded.*

31. *Sericeum.* *Silky H.* Creeping. Branches erect. Leaves subulate, silky, yellowish. Antheræ erect. Dec. Jan. On walls, trees, &c. *Curt.* ii. 69.

32. *Velutinum.* *Velvet H.* Differs from the last in being much shorter, more green, and more compact, and the antheræ drooping. Feb. In woods, &c. *Dill.* 42. 61.

33. *Serpens.* *Creeping H.* Stems very slender and short. Leaves obliterated. Antheræ

- erect, oblong, somewhat large; pedicles long. Apr. On old trees. *Dill.* 42. 64.
34. *Sciuroides*. *Squirrel-tail H.* Stem erect, branched, curved. Leaves dark-green. Feb.—Apr. On trees. *Dill.* 41. 54.
35. *Myofuroides*. *Mouse-tail H.* Branches very numerous, subulate. Leaves triangular, narrow. Antheræ oblong, drooping. Feb. On walls, &c. *Dill.* 41. 51.
36. *Gracile*. *Bird's-foot H.* Stems creeping, much resembles the preceding; but rarely above two inches long. HUDS. *Dill.* 41. 55.
37. *Clavellatum*. *Club H.* Creeping. Branches erect, much crowded. Pedicles short. Antheræ curved. Dec. On old trees, &c.

### III. A L G Æ, *Flags*.

Root, stem, and leaf, all in one.

**JUNGERMANNIA.** Anthera oval, opening in 4 valves, on a long strait pedicle, from a membranous vagina; valves spreading, permanent. *Female* consists only of naked sessile seeds, generally on the same plant.

\* *Leaves pinnated, turned one way.*

1. *Asplenoides*. *Spleenwort J.* Stem 5 or 6 inches long, inclining, purple. Leaves alternate, roundish, scarce touching; minutely fringed at the edge. Pedicle half an inch long. Flower, formed of the expanded anthera, large, black. Feb. Mar. In woods, &c. *Dill.* 69. 5.

2. *Viti-*

2. Viticulosa. *Straggling* ♀. Simply pinnated. Leaves subulate, small, dense. Flowers from the base and from the middle. In wet woods. *Dill.* 69. 7.
3. Polyanthos. *Many-flowered* ♀. Simply pinnated, creeping. Leaves imbricated, dense, intire, roundish, pointed, convex. Pedicle, from the origin of the stem, an inch and half long. Flower blackish, with very narrow segments. Apr. On bogs, &c. *Dill.* 70. 9.
4. Lanceolata. *Spear-leaved* ♀. Small, creeping, flowering at the top. Leaves simply pinnated, intire, lance-shaped, dense, fine green. Feb. In wet shady places. *Dill.* 70. 10.
5. Bidentata: *Bifid* ♀. Differs from the last in being larger, and the leaves bifid, concave, and more acute. Oct. Nov. In woods, heaths, &c. *Dill.* 70. 11.
6. Bicuspidata. *Forked* ♀. Small, creeping, flowering from the middle. Vaginæ cylindrical. Leaves bifid, roundish. Mar. In moist shady places. *Dill.* 70. 13.
7. Quinquedentata. *Toothed* ♀. Pinnated, branched, flowering at the top. Leaves quinquedentate. Apr. In Yorkshire. *Dill.* 71. 23.

\* \* *Pinnated with auriculæ.*

8. Undulata. *Eared* ♀. Bipinnated above, flowering at the top. Leaves roundish, undulated, intire, equal, alternate, distich, auriculate. Mar. In woods, &c. *Dill.* 71. 17.

9. *Nemorea*. *Wood* f. Differs from the last in the leaves being fringed, and less S. Br.
10. *Resupinata*. *Curled* f. Bipinnated above, flowering below. Leaves round, notched, imbricated, curled. Apr. In the fissures of rocks. *Dill.* 71. 19
11. *Albicans*. *White* f. Bipinnated above, flowering at the top. Leaves linear, curved. March. In woods, &c. *Dill.* 71. 20.
12. *Trilobata*. *Trifid* f. Bipinnated beneath. Leaves broad, trilobed. S. Brit.
13. *Reptans*. *Creeping* f. Bipinnated beneath, apex creeping, flowering at the base. Leaves quadridentate, imbricated. Apr. In shade. *Dill.* 71. 24.
14. *Multiflora*. *Many-flowered* f. Leaf branched, creeping, acute, simply pinnated, flowering at the base. HUDS. *Dill.* 69 4.  
 \*\*\* *Leaves doubly imbricated.*
15. *Complanata*. *Flat* f. Creeping. Branches equal. Leaves auriculate below, doubly imbricated, yellowish, flat. Apr. On the trunks of trees frequent. *Curt.* iv. 68.
16. *Dilatata*. *Scaly* f. Less than the last. Branches broader at the top, and the scales convex. Mar. On trees frequent in the North. *Dill.* 72. 27.
17. *Tamarisci*. *Tamarisk* f. Upper leaves roundish, convex, obtuse, much larger than the rest, black-purple. On trees in the North. *Dill.* 72. 31.
18. *Platyphylla*. *Wall* f. Procumbent, imbricated beneath. Leaves cordated, acute, dark-

dark-green. March, April. On walls and trees. *Dill.* 72. 32.

19. *Ciliaris*. *Fern* ♀. Creeping. Leaves oval, acute, auriculate below, and fringed. Apr. On heaths, near rivulets, &c. S. Brit.

20. *Varia*. *Upright* ♀. Not quite erect. Leaves cordated, carinated, bipartite, bifarious. Mar. In woods, &c. S. Brit.

\*\*\*\* *Imbricated on every side. Leaves irregular.*

21. *Julacea*. *Round* ♀. Stems cylindrical. Flowers on pedicles. Oct. On rocks in Wales. *Dill.* 73. 38.

22. *Concinnata*. *Braided* ♀. Stems round, a little compressed, imbricated, compact. Leaves invisible to the naked eye, smooth, brown, whitish at the edge, pressed close to the stem. Antheræ pedunculate. Highlands, N. Brit. Sept. Oct. *Dill.* 73. 38? LIGHTF.

23. *Rupestris*. *Rock* ♀. Stems cylindrical. Leaves subulate, reflex, dark-green. Apr. May. On rocks in Wales. *Dill.* 73. 40.

24. *Trichophylla*. *Hairy* ♀. Stems cylindrical, a little erect. Leaves equal, capillary, pointed, erect. Flowers at the extremity. On moors, in the North. S. Br.

25. *Alpina*. *Mountain* ♀. Stems cylindrical. Leaves oval, spreading, dark-reddish. Calyces imbricated. On bogs on the mountains in Wales. *Dill.* 73. 39.

\*\*\*\*\* *Without stem. Leaves simple.*

26. *Epiphylla*. *Broad-leaved* ♀. Leaves broad, depressed and black in the middle, lacinated



niated and curled at the edges. Flower whitish, from the middle of the leaf, with spongy threads in the center. Mar. In rivulets frequent. *Dill.* 74. 41.

27. *Pinguis*. *Jagged* ♀. Leaf oblong, pale-green, sinuated, fatty. Antheræ oblong, from the division of the leaves. April. On bogs, &c. *Dill.* 74. 42.
28. *Multifida*. *Dwarf* ♀. Leaves bipinnatifid. Apr. In woods. S. Brit.
29. *Furcata*. *Globe* ♀. Leaves linear, branched, forked at the extremities. April. In woods. *Dill.* 74. 45.
30. *Pusilla*. *Shining* ♀. Leaves sub-pinnatifid; lobes imbricated. Antheræ black, shining. Perichætium plicated. On heaths. S. Brit.

**TARGIONIA.** Calyx black, bivalve, or rather bifid, with a longitudinal slit, including a globe. *Habit*, a leafy substance.

1. *Hypophylla*. *Vetch* T. Leaf single, small, flat, oblong, notched or digitated, half an inch long, first green, then dark purple, blackish beneath, bearing on the apex, beneath, fruit like a small vetch. In the north of England. *Dill.* 78. 2.

**MARCHANTIA.** *Male*: Calyx peltate, covered beneath by monopetalous corollæ, on a long, strait, tetragonal pedicle, from the apex of the leaf. Anthera multifid. *Female*: Dispersed, on the same plant, sessile, consisting of a campanulate calyx, with many seeds in the bottom.

bottom. *Habit*: Flat leaves, attached by very slender fibres from the under surface.

1. Polymorpha. *Common M.* A congeries of broad, irregular, dusky green leaves, often imbricated. Common calyx with ten segments. Pedicle an inch long. Head stellate. Aug. Near springs, damp walls, &c. *Dill.* 76. 6.
2. Cruciata. *Cross-headed M.* Leaves fine green, without nerve, spread in a broad circle. Common calyx quadripartite, segments tubular. Pedicle two inches long. Head cruciate. Female lunated. July, Aug. In shady places.
3. Hemispherica. *Marsh M.* Common calyx quinquifid, hemispherical. Pedicles short. Head stellate. Perichætium 0. On bogs, &c. Apr. May. *Dill.* 75. 2.
4. Conica. *Wart M.* Leaves in large clusters, laciniated, obtuse, green, with many white tubercles. Common calyx quinquelocular, oval. Globules 5 or 6 on each pedicle. Apr. On the banks of rivulets, &c. *Dill.* 75. 1.

BLASIA. Calyx cylindrical, filled with seed. Fruit roundish.

1. Pusilla. *Dwarf B.* Leaves small, in a circle from one to two inches diameter, deep purple at the base, green at the edges, laciniated. Heads globose, on slender pedicles an inch long. Near Manchester, Northumberland, &c. *Dill.* 31. 7.

RICCIA. Calyx 0. Corolla 0. Anthera cylindrical, sessile, on the germen. Style

perforating the anthera. Seeds hemispherical, pedicillated.

1. Minima. *Small R.* Leaves smooth, bipartite, acute, expanded on the ground Nov. After inundation. S. Brit.
2. Glauca. *Marsh R.* Leaves smooth, small, middle nerve depressed, divided into 2 or 3 thick lobes. Mar. In fens, &c. *Dill.* 78. 10.
3. Fluitans. *Floating R.* Leaves linear, forked. In stagnant water. S. Brit.
4. Natans. *Fringed R.* Leaves obcordate, fringed. In stagnant water. HUDS. S. Brit.
5. Sinuata. *Rock R.* Leaves, branched, segments sinuate, broader at top, notched. HUDS. *Dill.* 142.

ANTHOCEROS. Calyx sessile, truncated, intire. Anthera single, subulate, very long, bivalve. *Female* generally on the same plant; calyx sexpartite; seeds three.

1. Punctatus. *Spotted A.* A cluster, near an inch in diameter, of green, thin, almost pellucid, oblong, irregular, sinuated, glossy, punctured leaves. Apr. In damp shady places. *Fl. dan.* 396.

LICHEN. *Archel*, or *Liverwort*. *Male*: Numerous, on a receptacle generally orbicular, large, shining, plane, convex or concave, glutinous. *Female*: Farina sprinkled on the same, or on a separate plant.

\* *Spotted*,

\* *Spotted, tubercular.*

1. *Scriptus. Lettered L.* Very thin, whitish, with black irregular lines, resembling some sort of letters or characters. On the bark of trees frequent. *Dill.* 18. 1.
2. *Geographicus. Map L.* Yellowish, with black lines, resembling a geographical map. On calcareous rocks in the northern counties. *Dill.* 18. 5.
3. *Atrovirens. Black-green L.* Crust green, with tubercles, and a black margin. **LIGHTF.**
4. *Rugosus. Wrinkled L.* Whitish, covered with simple black lines and dots. On trees. *Dill.* 18. 2.
5. *Pertusus. Porous warty L.* Crust smooth, green-ash, thick set with angular warts, punctured with black. *Dill.* 18. 9.
6. *Sanguinariu. Black nobbed L.* Greenish ash-colour, with very black tubercles, which are red within. On rocks, and on the bark of trees. *Dill.* 18. 3.
7. *Fusco-ater. Wall L.* Brown, with black tubercles. On old walls frequent.
8. *Calcarius. Dyer's L.* White, with black tubercles. On calcareous rocks in Westmoreland and in Wales. *Dill.* 18. 8.
9. *Atro-albus. Black and white L.* Tubercles black and white. On rocks.
10. *Vernalis. Vernal L.* Crust ash-colour, or whitish. Tubercles red-brown. *Dill.* 18. 4.
11. *Rupicola. Pale Rock L.* Crust ash-colour; tubercles nearly the same, with a whitish margin. **LIGHTF.**

12. Ven-

12. *Ventosus*. *Red-spangled L.* Crust hard, tartareous, cracked, tessellated, pale yellow. Top of the tubercles blood-red. *Dill.* 18. 14.

13. *Fagineus*. *White L.* White, with white tubercles, mealy. On the bark of the hornbeam, elm, and beech. *Dill.* 18. 11.

14. *Carpineus*. *Hornbeam L.* Ash-coloured, with whitish wrinkled tubercles. On the bark of the hornbeam, hazel, and ash. *Dill.* 18. 11. C. D?

15. *Ericetorum*. *Heath L.* White, with reddish tubercles. On wet heaths, &c. *Dill.* 14. 1.

16. *Corallinus*. *Coralline L.* Appears a white tartareous crust; but if broken and magnified, it resembles bundles of coral. *Dill.* 17. 36? LIGHTF.

\* \* *Crustaceous, spotted with scutellæ, or little targets.*

17. *Candelarius*. *Yellow L.* Deep yellow, with paler scutellæ. Dec.—June. On walls, bark of trees, &c. *Dill.* 18. 18.

18. *Tartareus*. *Welsh L.* Silver-grey, thick. Scutellæ large, pale-yellow, with a white margin. On rocks in Wales and the north of England. *Dill.* 18. 13.

19. *Pallefcens*. *Pale L.* Whitish orbicular, downy. Scutellæ pallid, sometimes greenish. On walls and on the bark of trees. *Dill.* 18. 17.

20. *Subfuscus*. *Brownish L.* Whitish. Scutellæ brownish, with a grey margin, slightly notched. On the bark of trees, and walls. *Dill.* 18. 16.

21. *Ater.*

21. Ater. *Black-cupped L.* Crust grey, shields small, numerous, black, with white margins. *Dill.* 18. 15. and 55. 8. LIGHTF.

22. Parellus. *Crayfish-eye L.* Crust white, shields numerous, with shallow, ash-coloured, plane disks, with obtuse margins. *Dill.* 18. 10. LIGHTF.

\*\*\* *Imbricated.*

23. Centrifugus. *Spreading L.* Foliola multifid, smooth, centrifugal. Scutellæ red brown. On large stones in Wales, &c. *Dill.* 24. 75.

24. Cartilagenous. *Cartilagenous L.* Leaves small, pale, greenish-yellow, cartilagenous, round, notched, clustered. Shields orange-tawny. *Dill.* 24. 74. LIGHTF. Omitted by Linnæus.

25. Saxatilis. *Stone L.* Imbricated. Greenish grey. Foliola sinuated, rough. Scutellæ the same colour. On stones, trunks of trees, &c. frequent. *Dill.* 24. 83.

26. Omphaloides. *Purple L.* Imbricated. Foliola multifid, smooth, obtuse, downy, purple, an inch long. On rocks, &c. *Dill.* 24. 80.

27. Olivaceous. *Olive L.* Imbricated. Foliola lobed, glossy, livid. Scutellæ large. On rocks, trees, &c. *Dill.* 24. 78.

28. Fahlunensis. *Small black Cork L.* Leaves linear, smooth, very small, black, divided and sub-divided. Shields small, black. *Dill.* 24. 81. LIGHTF.

29. Cris-



29. *Crispus. Curled Jelly L.* Leaves lobed, truncated, notched, black-green. Shields of the same colour. HUDS. *Dill* 19. 23.
30. *Cristatus. Crested Jelly L.* Leaves notched, fringed, blue-green. Shields brown, larger than the leaf. *Dill* 19. 26.
31. *Parietinus. Common L.* Imbricated. Foliola yellow, curled. Scutellæ of the same colour. On walls and trees. *Dill* 24. 76.
32. *Phyodes. Inflated L.* Imbricated. Ash-colour. Laciniæ obtuse, sub-inflated; concave, furrowed, and black beneath. On heaths in the North. *Dill* 20. 49.
33. *Stellaris. Starry L.* Imbricated. Foliola oblong, narrow, lacinated, ash colour. Scutellæ black. On the bark of ash-trees, &c. *Dill* 24. 70.
34. *Pullus. Small brown L.* Leaves brown, numerous, small, notched, convex, segments deflexed. Shields darker, margins paler, and crisped. *Dill* 24. 69. LIGHTF. Omitted by *Lin*.
35. *Plumbeus. Lead coloured spongy L.* Leaves laciniated, obtusely lobed, hairy beneath. Shields red-brown. On trunks of trees. *Lightf.* xxvi. p. 827. Omitted by *Lin*.

\*\*\*\* *Foliaceous.*

36. *Ciliaris. Hairy L.* Ash-colour, a little erect; segments linear, fringed, with hairs at the edge. Scutellæ notched, on pedicles, black. On the bark of trees frequent. *Dill* 20. 45.

37. *Islandi-*



37. Islandicus. *Eringo leaved L.* Rigid, dry, ascendent, laciniated or forked; margin raised, regularly fringed with short spines. Colour whitish, but varying to brown or purple. Scutellæ rarely visible. On heaths and mountains in Wales, &c. *Dill.* 28. 111.
38. Nivalis. *Snow L.* Erect, concave, laciniated, smooth, curled at the edges, silver-white above, with a greenish cast when young; brown beneath. Tubercles brown. On the ground, on barren hills. *Wallis. Northumb. Fl. dan.* 227.
39. Burgeffii. *Crowned L.* Leaves thin, membranous, pellucid dull-green, somewhat erect, curled, lobed, notched. Shields flat, smooth, of the same colour. On the trunks of hazel and birch. *Lightf.* xxvi. p. 827.
40. Pulmonarius. *Tree L. or Lungwort.* Laciniated, obtuse, smooth, pale brown, reticular above, woolly beneath. Scutellæ at the edges. On the bark of oak and ash trees. *Dill.* 29. 113.
41. Furfuraceus. *Branny L.* Decumbent, plane, soft; segments unequal, acute; above white or ash-colour; beneath black. On trees. *Dill.* 21. 52.
42. Ampullaceus. *Bladder L.* Lobed, notched, smooth, curled at the edge, with globular inflated vesicles. In mountainous pastures in Lancashire, &c. *S. Brit.*
43. Farinaceus. *Mealy L.* Erect, compressed, branched, ash-colour, mealy, with tubercles on the margin. On the bark of trees. *Dill.* 23. 63.
44. Cali-

44. Calicaris. *Channeled L.* Erect, linear, branched, channeled, ash-colour, convex, with points, resembling coral. On rocks and trees. *Dill.* 23. 62.
45. Fraxineus. *Ash L.* Erect, oblong, rigid, lacinated, channeled, smooth, ash-colour. Scutellæ on short pedicles. On ash and oak trees. *Dill.* 22. 29.
46. Prunastri. *Thorn L.* A little erect, channeled, soft, downy, white beneath, branched like deers horns. On the bark of thorns and other trees. *Dill.* 55. 54.
47. Juniperinus. *Juniper L.* Lacinated, curled, yellow; peltæ brown. On the bark of trees. *Dill.* 24. 76.
48. Caperatus. *Sulphur-green Rose L.* Leaves wrinkled, waved at the edge, growing in the shape of a rose, from 1 inch to 1 foot in diameter. Shields rare, large, concave, red-brown. *Dill.* 25. 97.
49. Glaucus. *Shining L.* Depressed, lobed, smooth, shining, ash-colour; margin curled and mealy; blackish beneath. In mountainous pastures. *Dill.* 25. 96.
50. Perlatus. *Pearl-coloured L.* Leaves smooth, but not glossy, lobed, edges raised and curled. Under-side black, hairy. Shields large, concave, but rarely seen. *Dill.* 20. 39.
51. Vespertillio. *Bat's-wing L.* Gelatinous, membranous, wrinkled, lobed, black-green, circular. Shields dark-red, numerous, crowded, near the centre. *Dill.* 19. 20. *L. nigriscens* of *Huds.* LIGHTF.

52. Fasci-

52. *Fascicularis*. *Small cluster L.* Leaves in erect clusters, one-fourth of an inch high, black-green, gelatinous, pellucid, slightly palmated. Shields numerous, crowded, large. *Dill.* 19. 27.
53. *Tremelloides*. *Tender L.* Leaves lead-colour, thin, transparent, from half to one inch high, jagged, curled. Shields red, but seldom found. *Dill.* 19. 31. 32, 34. LIGHTF.

\*\*\*\*\* *Coriaceous.*

54. *Resupinatus*. *Livid L.* Foliaceous, creeping, lobed, dark ash-colour, reddish white beneath; peltæ red, marginal, on the under side. On pebbles on the coast of Suffex, and on rocks in Shropshire. *Dill.* 28. 105.
55. *Aphtofus*. . . . . Foliaceous, creeping, lobed, digitated, obtuse, plane; above lively green, whitish at the edges, and brown beneath. Tubercles marginal, black. On the rocks near the Roman wall, by Crag-Lake, *Wallis. Northumb.* *Dill.* 28. 106.
56. *Caninus*. *Ash-coloured Ground L.* Foliaceous, creeping, lobed, obtuse, plane; veiny and villous beneath; peltæ marginal, ascendent. On heaths, &c. *Dill.* 27. 102.
57. *Venosus*. *Small dark-veined L.* Leaves half an inch, flat, smooth, wedge-shaped, above green, beneath white, with thick dark veins, *Dill.* 28. 109. Discovered by Dr. Burgets, in Dumfriesshire, in Scotland. LIGHTF.

58. Syl-

58. *Sylvaticus*. *Wood* L. Leaves creeping, sinuated, jagged, smooth, pitted, dull green; beneath downy, spongy, black brown. Shields chestnut, at the extremities, but very rare. *Dill.* 27. 101. LIGHTF.
59. *Horizontalis*. *Brown flat-shielded* L. Brown-green, lobed, obtuse; under side veined, downy. Shields marginal, oval, brown, horizontal. *Dill.* 28. 104. HUDS. LIGHTF.
60. *Scrobiculatus*. *Warty* L. Blue-green, lobed, obtuse, pitted, warty, mealy; under side downy, without veins, spotted, spongy. Shields very rare. *Dill.* 29. 114. LIGHTF. Not described by *Lin.*
61. *Læte-virens*. *Green* L. Fine green, smooth, not pitted, lobed, jagged. Beneath white or buff, downy. Shields numerous, red. *Dill.* 25. 98. LIGHTF. Not described by *Lin.*
62. *Glomuliferus*. *Blue* L. Leaves 5 inches long, pale blue, lobed, notched, their axillæ circular, smooth, without pits, bearing black-green balls. *Dill.* 26. 99. LIGHTF. Unknown to *Lin.*
63. *Saccatus*. *Socket* L. Glaucous green, circular. Shields black-brown, in sockets. *Dill.* 30. 121. LIGHTF.
64. *Croceus*. *Saffron* L. Above light-green; beneath saffron. Shields dark fuscous, flat. *Dill.* 30. 120. LIGHTF.
- \*\*\*\*\* *Umbilicated, and dirty, as if with foot.*
65. *Miniatus*. *Cloudy* L. Foliateous, short, obtuse, curled, dry, ash-colour, punctured. Beneath

Beneath red-yellow, smooth. On rocks.  
*Dill.* 30. 127.

66. *Velleus. Fleecy L.* Foliaceous, roundish, peltated, almost intire, extremely hairy or woolly beneath. On rocks in the North.  
*Dill.* 545.

67. *Pustulatus. Singed L.* Foliaceous, ash-colour, orbicular, pustular, as if burnt, channeled beneath. On rocks in Radnorshire.  
*Dill.* 30. 131.

68. *Deustus. Sooty L.* Foliaceous, orbicular, intire, brownish, ash-colour, smooth, with small, black, compressed peltæ. On St. Vincent's Rock near Bristol. *Dill.* 30. 117.

69. *Polyphyllus. Smooth L.* Leaves numerous, smooth on both sides, notched. On Snowden-hills, on the rocks called Llyn Llydaw. *Dill.* 30. 129.

70. *Polyrhizos. Fibrous L.* Leaves numerous, smooth, dirty brown, black and fibrous beneath. With the former. *Dill.* 30. 130.

71. *Crinitus. Button L.* Margin notched, fringed. Peltæ resemble a black hair-button.  
*Dill.* 29. 116. *Lightf.*

\*\*\*\*\* *Cup-bearing.*

72. *Cocciferus. Red L.* Simple, intire, greenish grey, about an inch diameter, with scarlet tubercles round the edge of the cup. Nov.—Jan. In woods, heaths, &c.  
*Dill.* 14. 7.

73. Cornucopoides. *Radiated L.* Margins radiated, foliated. Cups large; tubercles scarlet. On heaths. *Dill.* 14. 9.
74. Pyxidatus. *Cup L.* Ash-colour, simple, notched round the edge. Tubercles brown. In woods, &c. *Dill.* 14. 6.
75. Fimbriatus. *Indented Cup L.* Simple. Margin of the cups denticulated, proliferous. In woods, &c. *Dill.* 14. 8.
76. Gracilis. *Tall L.* Branched, denticulated, slender, smooth, bright brown, 2 inches long. On heaths, &c. *Dill.* 14. 13.
77. Digitatus. *Fingered L.* Branches numerous, irregular, like coral. Cups intire; tubercles scarlet. Height 1 inch. *Dill.* 15. 19. A. B. C.
78. Cornutus. *Simple Cup L.* Generally simple, sometimes bifid. Cup intire, often obsolete. Ash-colour. Nov.—Feb. On heaths, &c. *Dill.* 15. 14. A. F.
79. Difformis. *Serrated L.* First erect, then curved, thickness of a quill, simple, slenderest at the base, a little downy. Cup dentated. On heaths, &c. *Fl. Lapp.* 11. 5.
80. Tubiformis. *Trumpet L.* Simple, intire, tubiform, with minute scarlet tubercles. *L. Filiformis* of Hudf. *Dill.* 14. 10. LIGHTF.
81. Alciformis. *Elk's-horn L.* Leaves nearly erect, large, smooth, tough, grey or yellow-green. *L. Foliaceous* of Hudf. *Dill.* 14. 12. LIGHTF.
82. Ventri-

82. *Ventricosus. Cornucopia L.* Much branched, 2 inches, hoary, resembling a pollard tree with its lop on. Cups notched, with brown tubercles. *Huds. Dill.* 15. 17. LIGHTF.

\*\*\*\*\* *Busby.*

83. *Rangiferinus. Rhen-deer L.* Much branched, tubular, white, soft when young; horns drooping, reddish. Fructification seldom visible. In woods, heaths, &c. *Dill.* 16. 29.
84. *Uncialis. Short L.* Tubular; branches short, acute, soft, slender. On heaths. *Dill.* 16. 22.
85. *Subulatus. Horned L.* Tubular. Grey. Branches few, simple, subulate. Length 3 inches. Fructification on the tips, small, round, brown. On heaths, &c. *Dill.* 16. 26.
86. *Paschalis. Woody L.* Solid, branched, 2 inches high, covered with crustaceous leaves, grey. On mountains in Wales and in the North of England. *Dill.* 17. 33.
87. *Fragilis. Brittle L.* Solid. Branches cylindrical, obtuse. Greyish brown. Height 1 inch. Tubercles black, crested, terminal. On mountains in Wales and in the north. *Dill.* 17. 34.
88. *Globiferus. Cypress L.* Much branched, solid, without leaves, ash-colour, smooth. Tubercles terminal, hollow, with a small aperture, black within. *Dill.* 17. 35.



89. *Corniculatus*. *Horned L.* Solid, branched, smooth, compressed, dichotomous, dusky olive. Scutellæ plane-convex, terminal. *Dill.* 17. 37. Unnoticed by *Lin.*  
LIGHTF.

\*\*\*\*\* *Filamentous.*

90. *Plicatus*. *Common Hairy L.* Pendulous, implicated, long. Scutella radiated. On trees. *Dill.* 11. 1.
91. *Barbatus*. *Bearded L.* Long, pendulous, ash-colour, sub-articulated. Branches spreading, very slender. In woods, &c. *Dill.* 12. 6.
92. *Jubatus*. *Fennel L.* Pendulous; alæ compressed. Blackish grey. On trees and stones. *Dill.* 12. 7.
93. *Lanatus*. *Woolly L.* Decumbent, implicated, opaque. Like black wool. On rocks. *Dill.* 13. 8.
94. *Chalybeiformis*. *Wiry L.* Decumbent, implicated, twisted, rigid. On trees. *Dill.* 13. 10.
95. *Hirtus*. *Rough L.* Erect, much branched, sprinkled with farinaceous tubercles. In woods. *Dill.* 13. 12.
96. *Vulpinus*. *Gold L.* Erect, much branched, yellow. In woods frequent. *Dill.* 13. 16.
97. *Articulatus*. *Jointed L.* Jointed. Branches very slender, punctured. In woods, but rare.

98. *Flori-*

98. Floridus. *Flowering L.* Erect, branched. Scutellæ radiated. In woods, &c. *Dill.* 13. 13.
99. Pubescens. *Black-lace L.* Fibers rigid, glossy, like horse-hair, interwoven like lace. *Dill.* 17. 32. LIGHTF.
100. Vulpinus. *Gold-wiry L.* Filaments erect, branched, straggling, entangled, yellow, compressed, 2 inches high. *Dill.* 13. 16. LIGHTF.

TREMELLA. Gelatinous, membranous substance: Fructification scarce visible.

1. Nostoc. *Jelly T.* Green or yellowish, plicated, undulated. On the ground generally after rain. Supposed by the country-people to be that meteor which they call a falling star. *Dill.* 10. 14.
2. Lichenoides. *Transparent T.* Erect, plane, margin curled, lacinulated, brown. On heaths, in woods, &c.
3. Verrucosa. *Warty T.* Tubercular, solid, wrinkled, roundish, resembling a bladder, blackish yellow. On stones in rivulets. *Dill.* 10. 16.
4. Hemispherica. *Sea T.* Scattered among *Confervæ*, *Fuci*, &c.
5. Purpurea. *Purple T.* Globular, sessile, solitary, smooth. On ditch-banks about London. *Dill.* 18. 6.

FUCUS. *Male*: Vesicles interwoven with hairs. *Female*: vesicles full of gelatinous matter,

matter, and covered with perforated granulæ. Seed single. *Habit*: immersed, coriaceous, without root, sessile.

\* *Leaves flat, dichotomous.*

1. *Serratus*. *Serrated F. or Sea Wrack*. Broad, tubercles at the apex. On rocks frequent. *H. ox.* iii. p. 648.
2. *Vesiculosus*. *Common F.* Intire, with a stem in the middle, and vesicles at the extremities. On rocks and stones on the shore every where. *Ger.* 1567. 4.
3. *Ceranoides*. *Buckshorn F.* Launce-shaped, intire, bifid, and tuberculated at the apex. On the sea-shore frequent. *H. ox.* 15. 8. 1. 8. 11.
4. *Spiralis*. *Twisted F.* Intire, punctated, membranous, channelled beneath. Fructification terminal, germinate, on pedicles, oblong. *Ger.* 1567. 4.
5. *Divaricatus*. *Shrubby F.* Membranaceous, linear, intire, divaricated at the axillæ. Vesicles axillary, two together, but sometimes single. On the coast. *H. ox.* p. 647.
6. *Distichus*. *Narrow-leaved F.* Leaf intire, five inches, without bladders, olive, cartilagenous, ribbed, dotted. *F. filiformis* of Hudf. *Fl. dan.* 351.
7. *Canaliculatus*. *Channelled F.* Leaf intire, channelled on one side, convex on the other, narrow, 3 inches. *F. Excissus* of Hudf. *H. ox.* 15. 8. 12.

\*\* *Leaves*

\* \* *Leaves cylindrical, dichotomous.*

8. Loreus. *Sea Thong*. Filiform, compressed, 3 feet by one-fifth of an inch, black yellow, covered with tubercles. *F. Linearis* of Hudf. Ger. 1568. 5.
9. Nodosus. *Knotted F.* Stem compressed. Leaves small, opposite. A large oval vesicle on the middle of each branch. On rocks on the shore. Ger. 1568. 6.

\*\*\* *Branched, cylindrical.*

10. Siliquosus. *Podded F.* Much branched, flexible, compressed. Leaves distich, alternate, intire. Frustrification alternate, pointed, taper, on a pedicle, larger than the leaf. On the sea-shore. Ger. 1569. 7.
11. Tuberculatus. *Tuberculated F.* From 9 to 12 inches, red, tender. *F. Purpureus* of Hudf.
12. Flagelliformis. *Whipcord F.* Length 1 to 2 feet, dark red or greenish, slippery, tender, size of the first string of a fiddle. *Fl. dan.* 650. LIGHTF. Not in *Lin.*
13. Plicatus. *Matted F.* Length 5 inches, capillary, brown, warty, waved at the ends. *Fl. dan.* 408. HUDS.
14. Fastigiatus. *Short forked F.* Length 3 to 6 inches, size of pack-thread, branches of an equal length, olive, or black-red. *Fl. dan.* 393.
15. Fœniculaceus. *Fennel-leaved F.* Filiform, much branched. Vesicles oval, terminated

ted by small leaves with many segments, often with tubercles at the ends. On the coast of Yorkshire and Lancashire.

16. *Abrotanifolius*. *Jointed F.* Filiform, compressed, bipinnated. Apices dilated, vesicular. On the Suffex coast.
17. *Digitatus*. *Fingered F.* Length 3 feet. Stem cylindrical; segments of the leaf ensiform, 2 feet long. *Fl. dan.* 392.
18. *Polyschides*. *Great-fingered F.* Root a hollow bulb. Stem 2 feet long; segments from 6 to 30; sometimes 3 or 4 yards high. LIGHTF.
19. *Esculentus*. *Eatable F.* Leaf simple, ensiform, from 4 to 7 feet, by 6 to 12; stem pinnated, through the whole length of the leaf. *Lightf.* xxviii. p. 938.
20. *Ligulatus*. *Strap F.* Leaf dull-green, membranous, pellucid, without nerve. Middle stem flat, linear, continued, one-fifth of an inch wide, straps, bipinnated. *Lightf.* xxix. p. 946.
21. *Laciniatus*. *Jagged F.* Bright red or purple, membranous, without rib or nerve; leaf dilated, palmated, often dichotomous. HUDS. LIGHTF.
22. *Endiviæ-folius*. *Endive-leaved F.* Pale red, thin, without rib or nerve. Length and breadth 2 or 3 inches; red warts in the dents. A new species. *Lightf.* xxxii. p. 964.

\*\*\* *Fruetification not vesicular.*

23. *Confervoides*. *Reddish F.* Filiform, cylindrical, compressed, much branched; branches

branches unequal, setaceous. Tubercles dispersed, roundish. On the northern coast.

24. Muscoides. *Thorny F.* Cylindrical, much branched; branches irregular, with short, alternate, soft spines. Dark-brown, diaphanous. On the Yorkshire coast.
25. Cartilagineus. *Scarlet F.* Much branched, supra-decomposite, pinnated; segments linear, scarlet. Fruit globular, lateral. On the coast frequent.
26. Saccharinus. *Sweet F.* Stem cylindrical, very short. Leaf long, ensiform, simple, thick. On the coast.
27. Palmatus. *Handed F. Dillisk.* Leaf plane, resembling a hand. On the coast frequent. *Lightf.* xxvii. p. 933.
28. Rubens. *Red F.* Stem branched, cylindrical. Leaves oblong, undulated, sinuated. On the Cornish coast. *Fl. dan.* 652.
29. Furcellatus. *Sharp-pointed F.* Cylindrical, dichotomous. Branches equal, long, acute. On the coast frequent. *H. ox.* 15. 9. 4.
30. Filum. *Thread F.* Simple, filiform, opaque, brittle. On rocks on the coast. *Pet.* 91. 5.
31. Hirsutus. *Hairy F.* Filiform, much branched, intirely covered with hairs scarce visible to the naked eye.
32. Aculeatus. *Prickly F.* Linear, filiform, with many branches, compressed; lateral margins with teeth erect, subulate. On the coast of Cornwall. *Fl. dan.* 355.

33. Cili-

33. *Ciliatus*. *Fringed F.* Flat, branched, membranous, reddish. Leaves narrow, fringed with long hairs. On the coast.
34. *Sanguineus*. *Dock-leaved F.* Stem cylindrical, branched. Leaves oblong, pointed, waved, intire. On the coast. *H. ox.* 645. 15. 8. 6.
35. *Prolifer*. *Proliferous F.* Red, without rib or nerve. Length 5 inches; breadth of each leaf one-fourth of an inch, catinatoproliferous, dilated and bifid at the apex. *Lightf.*
36. *Alatus*. *Winged F.* Bright red or purple, thin, transparent, 3 or 4 inches, breadth rather more. Stem flat, much branched; branches alternate, dichotomous, winged. *Fl. dan.* 352. *LIGHTF.*
37. *Dentatus*. *Dented F.* Dark red, thin, transparent, without nerve, length 5 inches, breadth 6 or 7. Much branched, doubly pinnatifid, alternate. *H. ox.* 646. 15. 5. *LIGHTF.*
38. *Pinnatifidus*. *Pepper F.* Yellow olive, often tinged with red, transparent, 2 or 3 inches high, dentated, branched almost from the base. *Huds.*
39. *Plumosus*. *Feathered F.* Deep red or purple, 5 or 6 inches, doubly pinnated, resembling a feather. *Fl. dan.* 350. *Huds.*
40. *Plocameum*. *Pectinated F.* Bright red, delicate, transparent, 3 or 4 inches, branched, divided, sub-divided, and toothed. *Huds.* *LIGHTF.*

41. Verti-



41. *Verticillatus*. *Verticillate* F. Pale green, 5 inches; stems from the root tubular, cylindrical; branches subulate, in whirls. A new species. *Lightf.* xxxi. p. 962.
42. *Pygmæus*. *Pigmy* F. Black green. Leaves erect, branched and dichotomous, resembling stag's horns. *Lightf.* xxxii. p. 964. New species.

ULVA. *Laver*. Fructifications in a diaphanous membrane. *Habit*: immersed, sub-diaphanous, sessile, without root.

1. *Pavonia*. *Turkey-feather* L. Flat, reniform, striated crosswise. *Syst. Nat.* 719.
2. *Intestinalis*, *Gut* L. Tubular, simple. In salt ditches on the coast. *Dill.* 47. 9. 7.
3. *Compressa*. *Flat* L. Tubular, branched, compressed. On rocks and stones on the coast. *Pet.* 9. 6.
4. *Confervoides*. *Jointed* L. Filiform, tubular, jointed, with branches, compressed, alternate. On the Cornish coast.
5. *Latissima*. *Curled* L. Oblong, flat, undulated, membranous, green, sometimes purple. On the coast.
6. *Lactuca*. *Green* L. or *Oyster-green*. Aggregate, membranous, pallid, palmated. Segments again divided into leaves undated, oval, obtuse, pellucid. In the sea. *Dill.* 48. 8. 1.
7. *Umbilicalis*. *Navel* L. Flat, orbicular, sessile, coriaceous. On rocks, &c. on the coast. *Dill.* 45. 8. 3.

8. *Linza*.

8. Linza. *Ribbon L.* Oblong, deeply wrinkled, On the coast near Sheerness, &c.
9. Granulata. *Bladder L.* Spherical, aggregate, green. On the edge of ponds and ditches. *Dill.* 55. 10. 17.
10. Laciniata. *Lacinated L.* Red ; leaves plane, dilated at the apex, lacinated, undulated, 4 inches long, 2 inches wide. New species. *Lightf.* xxxiii. p. 974.

CONFERVA. Fructification tubercular, unequal, dispersed, on long capillary fibres, either sessile or floating.

\* *Filaments simple, equal, without joints.*

1. Rivularis. *River C.* Very long, slender, deep-green. *Dill.* 12. 2. 1.
2. Fontinalis. *Spring C.* Brown, soft, not quite a finger's length. In the New River, near Hornsey. *Dill.* 2. 3.

\*\* *Filaments branched, equal.*

3. Bullofa. *Cotton C.* Filaments slender, green, intricate, including air-bubbles. In stagnant water frequent. *Dill.* 3. 11.
4. Canalicularis. *Mill C.* Slender green, most branched towards the base. In pure streams, and mill-troughs or spouts. *Dill.* 21. 4. 15.
5. Amphibia. *Amphibious C.* Fibrillous, spongy, forming, when dried, into spines. On the banks of the Thames. *Dill.* 22. 4. 17.

6. Æru-

6. *Æuginosa*. *Sea-green C.* Capillary, about 2 inches long, soft, fine green. On the coast. *Dill.* 23. 4. 20.
7. *Dichotomo*. *Bristle C.* Like bristles, forked. In ditches.
8. *Scoparia*. *Broom C.* Filaments proliferous, fastigate, pinnated. On the coast. *Dill.* 24. 4. 23.
9. *Cancellata*. *Latticed C.* Filaments alternate, short, multipartite, fingered. On the coast.
10. *Littoralis*. *Olive Sea C.* From 4 to 12 inches, branched, capillary, tender, soft, but not gelatinous. *Dill.* 22. 4. 17.
11. *Fæniculata*? *Fennel-leaved C.* Finer than fennel, soft, yellow-green. On the Western coast. *HUDS.* *Dill.* 16. 2. 8.
12. *Tomentosa*. *Flock C.* From 1 to 6 inches, extremely fine, twisted, red-brown. On the West coast. *HUDS.* *Dill.* 19. 3. 13.
13. *Spongiosa*. *Sponge C.* Dark green, 3 inches, thick as pack-thread, the simple branches imbricated with hairs. *HUDS.* *H. ox.* iii. 650. 15. 9. 6.

\* \* \* *Filaments anastomosing.*

14. *Reticulata*. *Net C.* Soft; filaments uniting like a net. In rivulets, on Hounslow-heath, &c.

\* \* \* \* *Filaments knotted.*

15. *Fluviatillis*. *Horse-tail C.* Simple, lubricous, slender, taper, straight, with joints angular,

gular, or knots. In a rivulet near Bangor in Wales. *Dill.* 39. 7. 47.

16. *Gelatinosa*. *Frog-spawn C.* Branched, spindle-shaped, with globose, gelatinous knots. In clear springs. *Dill.* 37. and 38. 7.

\*\*\*\*\* *Filaments jointed.*

17. *Verticillata*. *Verticillate Sponge C.* Dark green, 5 inches, irregularly branched, covered with close whirls of forked hairs, discoverable by glasses. A new species. *LIGHTF.*

18. *Equisetifolia*. *Red Sponge C.* Thick as pack-thread, 4 inches, branched, divided, sub-divided, whirled. New species. *LIGHTF.*

19. *Capillaris*. *Thread C.* Simple, with joints alternately compressed. In salt ditches. *Dill.* 25. 5. 25.

20. *Corallina*. *Coralline C.* Dichotomous, gelatinous, reddish. On the coast frequent. *Dill.* 33. 6. 36.

21. *Polymorpha*. *Palmated C.* Lubricous, black, with short palmated branches. On the coast. *Dill.* 33. 6. 35.

22. *Vagabunda*. *Spreading C.* Branches short, expanded like wool. In salt marshes or bogs. *Dill.* 30. 5. 32.

23. *Glomerata*. *Cluster C.* Much branched; branches short, multifid, rough. On the coast. *Dill.* 28. 5. 31.

24. *Rupestris*. *Rock C. or Sea Bread.* Branches alternate, branched again, green. On the coast, and in rivers on rocks frequent. *Dill.* 28. 5. 29.

25. *Æga-*

25. *Ægagropila*. *Globe C.* or *Moor-Balls*. With many branches from the centre, forming a globe. In lakes on mountains in the North.
26. *Nodulosa*. *Red knotted Sea C.* Much branched, divided, sub-divided, tuberculated, thick as sewing silk, 5 inches. *Dill.* 35. 6. 38. LIGHTF.
27. *Diaphana*. *Red dotted C.* One or 2 inches, fine, branched; joints diaphanous. On rocks. New species. LIGHTF.
28. *Plumosa*. *Red feathered C.* Much branched, compressed, branches supradecomposite, alternately pinnated. Fructification dioicious; 3 to 6 inches, elegant. *Ellis.* *C. rubra* of Hudf.
29. *Ciliata*. *Fringed C.* Minute, red, fine, dichotomous; joints numerous, diaphanous, encircled by a whirl of down. *Ellis. Phil. Trans.* lvii. 18. LIGHTF.

BYSSUS. Simple down or powder.

\* *Filamentous.*

1. *Septica*. *Mouse-skin B.* Soft, fragile, first white, then yellow, then black. In cellars on casks, &c. *Dill.* 6. 1. 12.
2. *Flos Aquæ*. *Green Paper B.* Filaments feathered, expanded. On stagnant water, like paper.
3. *Phosphorea*. *Violet-coloured B.* Like down on old trees. *Dill.* 4. 1. 6.
4. *Velutina*. *Velvet B.* Like green velvet, on the bark of trees and old gravel walks. *Dill.* 7. 1. 14.

5. *Aurita*

5. Aurea. *Saffron-coloured B.* Capillary, dusty; filaments some branched, others simple. On rocks. *Dill.* 8. 16.

\* \* *Powdry.*

6. Antiquatis. *Black Powder B.* On old walls frequent. *Dill.* 9. 1. 18.
7. Saxatilis. *Stone B.* Grey or ash-colour. On all stones long exposed to the air.
8. Candelaris. *Yellow B.* On trees and old walls every where. *Dill.* 3. 1. 4.
9. Botryoides. *Green B.* On the bark of trees and wet ground. *Dill.* 3. 1. 5.
10. Incana. *Mealy B.* Like meal, on gravelly ground, ditch-banks, &c. *Dill.* 3. 1. 3.
11. Lactea. *White B.* Crustaceous, like lime. On trees and mosses. *Dill.* 2. 1. 2.

#### IV. FUNGI, *Mushrooms.*

AGARICUS. Horizontal, with lamellæ or gills beneath.

\* *With a stem; head orbicular.*

1. Chantarellus. *Yellow A. or Champignon.* Lamellæ, or rather veins, branched, decurrent. Pale-yellow, contorted. Head depressed in the centre, deformed. Stem short. Of an agreeable taste. In pastures, woods, &c. *Fl. dan.* 264.
2. Integer. *White A.* Head a little concave at the top, purplish. Stem and gills white; lamellæ equal. In woods, &c. *Shæff.* 1. 15.

3. Ver-

3. *Verrucosus*. *Warty A.* Stem four and half by three quarters of an inch, bulbed and ruffled, reddish, spotted. Ruffle large, pendant, permanent. Cap 3 inches, hemispherical, then flat, reddish or yellowish. In woods, single. *Curt.* v. 72.
4. *Velutipes*. *Velvet stalked A.* Stalk 3 inches, footy, size of a quill, hollow, without ruffle or bulb. Cap from 1 to 3 inches, shapeless, orange-tawny. Gills yellowish or black. *Curt.* iii. 70.
5. *Floccosus*. *Shaggy A.* Stalk 4 inches, half an inch diameter, naked above the ring, which is small and near the cap. Cap from 1 to 4 inches, yellow-brown, convex: the whole shaggy. Generally in clusters at the root of trees. *Curt.* iv. 71.
6. *Aurantius*. *Orange A.* Stalk 2 to 3 inches, naked, smooth. Cap 1 to 3 inches, conical, clammy. *Curt.* v. 70.
7. *Æruginosus*. *Verdigris A.* Stalk 2 or 3 inches, crooked, round, shaggy below the ruffle. Cap 1 to 2 inches, conical, viscid, green. *Curt.* v. 70.
8. *Carnosus*. *Fleshy A.* Stalk 3 inches by half an inch, clumsy, naked, with red spots. Cap 1 to 3 inches, white, reddish in the middle, firm, thick. *Curt.* v. 71. New species.
9. *Glutinosus*. *Slimy A.* Stalk generally single, 2 to 4 inches, thickness of a crow-quill, almost solid. Head straw-colour, hemispherical;



mispherical; gills horizontal, brown purple. *Curt.* iii. 69.

10. *Plicatilis*. *Plaited A.* Stalk single, 2 inches, thickness of a straw, white. Cap campanulate, yellow-brown when full grown; afterwards flat, above an inch in diameter, and plaited. *Curt.* iii. 70.

11. *Ostreatus*. *Oyster A.* Stalk imperfect, frequently wanting. Cap shaped like an oyster. Gills first white, then reddish. On the trunk of the willow, &c. Dec. Jan. *Curt.* iii. 71.

12. *Procerus*. *Tall A. Annulatus* of Lightf. Stalk 6 inches, hollow, bulbous at the base, ruffled towards the top. Cap tawny, scaly, oval, afterwards campanulate. Sept. Oct. *Curt.* iv. 69.

13. *Muscarius*. *Red A.* A variety of the *Verrucosus*. Stalk white, very long, from a large bulb, with an annular membrane, which soon disappears. Head first campanulate, then plane, sometimes near 2 foot in diameter, blood-red, warty, striated at the edge. Gills white; lamellæ slender, white, numerous. Fœtid, said to be poisonous. In the meadows between Hampstead and Highgate. *Ger.* 1481.

14. *Lactifluus*. *Milky A.* Stem long, flesh colour. Head flesh-colour, a little concave, raised at the edge. Gills reddish brown. Contains a sweetish milk. Taste agreeable, and not pernicious. In woods. *Schoef.* 73.

15. *Pipe-*

15. *Piperatus*. *Pepper A.* Large. Head almost flat, first white, then brown, containing a very acrid milk. Gills pale flesh-colour. In woods. *Schoef.* 83.
16. *Campestris*. *Common Mushroom.* Head convex, scaly. Gills deep flesh-colour. In pastures frequent. *Sterb.* 1.
17. *Violaceus*. *Violet A.* Stem short, thick, downy, bulbous. Head very large, pale purple, convex. Esculent. Near woods, in meadows, &c. *Schoef.* 3. 34.
18. *Cinnamomeus*. *Brown A.* Head flat, brownish-yellow. Gills yellowish-brown. In woods frequent.
19. *Viscidus*. *Clammy A.* Stem white, thick. Head convex, purplish-brown, viscid. In woods. *S. Brit.*
20. *Coriaceous*. *Fairy A.* Stem 2 inches, tough, reversed. Cap size of half a crown, a little convex. Dirty white, thin. In dry pastures. Esteemed by the French. *Schoef.* 220. LIGHTF.
21. *Equestris*. *Starry A.* Small. Head convex, pallid; disk starred with yellow. Gills pale-yellow. On heaths frequent.
22. *Georgii*. *St. George's Mushroom.* Stalk firm, solid, with white down. Head broad, flat, powdery, white, growing gradually reddish, striated and downy at the margin. Gills white. Esculent. In woods *S. Brit.*
23. *Mammosus*. *Grey A.* Stalk long. Head conical, grey. Gills convex, grey, notched. In woods. *S. Brit.*

24. Clypeatus. *Long-stalked A.* Root bulbous, long, hooked at the end. Stalk white or grey. Head hemispherical, pointed, clammy, striated. Gills white. In woods. *Schoef.* 52.
25. Extinctorius. *Conic A.* Stalk long, subulate. Head conic, torn, white. Gills white. In meadows, &c. S. Brit.
26. Fimetarius. *Egg A.* Stalk long, hollow. Head campanulate, torn. Gills black. On dunghills frequent. *Curt.* ii. 73.
27. Campanulatus. *Bell A.* Stalk long. Head campanulate, striated, pellucid, grey. Gills white. In pastures. *Schoef.* 32. 211.
28. Separatus. *Blackish A.* Stalk bulbous. Head small, smooth, livid. Gills blackish. On dunghills. S. Brit.
29. Fragilis. *Brittle A.* Small. Head convex, clammy, pellucid, yellow. Gills deep-yellow. On heaths. *Schoef.* 2.
30. Ovatus? *Puckered A.* Stalk cylindrical, white, fistular, 3 to 6 inches; head when young oval, striated, grey or pale brown; rim contracted, when full-grown bell-shaped, and finally lacerated. Gills quite black. Generally in clusters on dung-hills, &c. *Plicatus* of LIGHTF. *Curt.* ii. 72. Very like the *A. fimetarius*.
31. Umbelliferus. *Wood A.* Small, white. Head convex, membranous, plicated, pellucid. Stalk long, slender. Among old leaves in woods. *Michel.* 166. 1. 80.

32. Andro-

32. *Androsaceus*. *Black-stalked A.* Differs from the last in having a black stem. On rotten wood. *Schoef.* 239.
33. *Clavatus*. *Pin-headed A.* Scarce an inch high. Stalk size of a pin, crooked, white or yellow. Cap size of a pin's head, yellow. On decayed leaves and moss. *Schoef.* 222. LIGHTF.

\* \* *Parasitic, without stem, with half a head.*

34. *Quercinus*. *Oak A.* Large, convex, hairy, colour various. Gills generally white, stiff, labyrinthiform. On the trunks of oak and other trees. *Schoef.* 57.
35. *Betulinus*. *Birch A.* Coriaceous, hairy, margin obtuse; lamellæ branched, communicating with each other. On the trunks of various trees. S. Brit.
36. *Alneus*. *Alder A.* Hairy, grey; lamellæ thick, bifid, powdery. On the trunks of trees.

BOLETUS. Horizontal; porous beneath; soft and elastic, like a cushion, above.

\* *Parasitic, without stem.*

1. *Tenax*. *Tough B.* Yellow or buff, like cork, horizontal, imbricated, lobed, arched, sinuated, convex above and beneath; under side porous. *Schoef.* 131. LIGHTF. On trunks of old trees.
2. *Suberosus*. *Cork B.* White, smooth: pores acute, diffused. On birch and ash-trees, &c.

3. Pomentarius. *Spongy B.* Unequal, obtuse; pores cylindrical, equal, bluish. On birch-trees, &c. S. Brit.
4. Cellulosus. *Honey-comb B.* Spongy, tawny; generally semicircular, scaly, from 5 to 10 inches broad, horizontal, large quadrangular pores on the under side. On the trunk of ash-trees, &c. Schoef. 101. LIGHTF.
5. Spongiosus. *Spongy B.* Horizontal, semicircular; above brown, woolly; beneath yellowish white, porous; very large. On the trunks of trees. July, LIGHTF.
6. Ignarius. *Tinder B.* Horizontal, ligneous, almost circular; above with zones brown or grey near the rim; beneath plain, yellowish, porous. It is the stiptic agaric in general use some time ago, and commonly used by the German postillions for lighting their pipes. Schoef. 137. LIGHTF.
7. Hepaticus. *Liver B.* Dark red, thick, fleshy; beneath tubular. Schoef. 119. Trunks of trees. LIGHTF.
8. Versicolor. *Striped B.* Convex, with concentric stripes of various colours; pores white, small. On trees. Schoeff. 268.

\* \* *With a stem.*

9. Luteus. *Yellow B.* Stem annulated, grey. Head livid or brown, a little clammy; pores convex, yellow. In woods frequent. Schoeff. 114. 123.

10. Bovi-

10. *Bovinus*. *Brown B.* Stem not annulated. *Head smooth, brown; pores large, composite, acute, greyish or greenish yellow.* July. In woods. *Schoeff.* 105. &c.

HYDNUM. Horizontal, prickly beneath.

1. *Imbricatum*. *Common Hydnum*. With a stem. Head convex, imbricated, white, thick. In woods. S. Brit.
2. *Repandum*. *Yellow smooth H.* *Schoeff.* 141.

PHALLUS. Reticular above, smooth beneath.

1. *Esculentus*. *Esculent Morel*. Stalk naked. Head oval, cellular, naked, wrinkled, whitish. Under the shade of ash and beech trees, in the spring. *Schoeff.* 199. &c.
2. *Impudicus*. *Stinking Morel*. White. Root a bulb. Stem long. Head conic, covered at first with reticular film. In woods. *Curt.* iii. 72.

HELVELLA. Turbinate.

1. *Mitra*. *Mitre Mushroom*. Stem thick, wrinkled, fistulous. Head curled, lobed, difformed. In damp woods. *Schoeff.* 154. &c.

PEZIZA. Campanulate, without stem.

1. *Lentifera*. *Black P.* Ash-colour, smooth, containing many seeds. On wood, in fields, &c. *Schoeff.* 180.



2. Punctata. *Spotted P.* Truncated, white, with black spots. On horfedung. *Fl. dan.* 288.
3. Cornucopoides. *Cornucopia P.* Dark-grey, disk expanded, sinuated, spotted, membranous, two inches high. In woods. *Schoef.* 165. 166.
4. Acetabulum. *Cup P.* Ash-colour. Angular on the outside, with branched veins. On rotten wood. *S. Brit.*
5. Cyathoides. *Smooth P.* Small, cup-fashioned. Margin obtuse, erect. In woods. *Schoef.* 148.
6. Scutellata. *Hairy P.* Small, plane. Margin convex, hairy. On rotten wood. *Schoef.* 284.
7. Auricula. *Jew's Ear.* First gelatinous, then membranous and hard, beneath hoary; colour of a bat's wing. *Ger.* 1401.

## CLAVARIA. Smooth, oblong.

\* *Undivided.*

1. Pistillaris. *Simple C.* Whitish, simple, like a nail. In woods, &c. *Schoef.* 171.
2. Ophioglossoides. *Black C.* Black, intire, compressed, obtuse. *Val. Par.* 7. 3.
3. Herculeana. *Great Club C.* Height 4 inches; shaped like a fig or club, yellow-brown, wrinkled, depressed at top. *Schoef.* 169.

LIGHTF.

4. Vermiculata. *Single taper C.* Two inches, worm-like, wrinkled longitudinally, yellow,



yellow, sometimes forked. *Michel.* 87.  
12. LIGHTF.

\* \* *Branched.*

5. *Digitata.* *Fingered C.* Black, woody. On rotten wood. *Mich.* 54. 55.
6. *Hypoxylon.* *Flat C.* Cornuted, black, small. *Michel.* 66. 3.
7. *Coralloides.* *Yellow C.* Branches numerous, close, unequal. In woods, &c. *Schoef.* 175.
8. *Fastigiata.* *Stinking C.* Branches fastigate. Yellow. In woods, &c. *Schoef.* 170. &c.
9. *Muscoides.* *Pointed C.* Yellow. Branches re-branched, pointed, unequal. In woods, &c. *Schoef.* 173.

LYCOPERDON. Roundish, replete with farinaceous seeds.

\* *Solid, subterraneous, without root.*

1. *Tuber.* *Truffle.* Round, prickly. In Rush-ton-Park, Northamptonshire. *Michel.* 1. 102.
2. *Cervinum.* *Branny Puff-ball.* Yellow. Skin hard, thick, granular; pulp purplish, with black seeds. In woods. *S. Brit.*

\* \* *Dusty, root above ground.*

3. *Bovista.* *Common Puff-ball* Dust flies off on breaking the skin. In pastures, &c. *Schoef.* 184. &c.

4. *Stel-*

4. *Stellatum. Star Puff-ball.* Stalk an inch and half long. Head large, white, dentated, smooth; volva multifid. In pastures, &c. S. Brit.
5. *Pedunculatum. Stalked Puff-ball.* Stalk long. Head round, smooth. Margin intire. In pastures frequent. S. Brit.
6. *Epidendrum. Little red wood Puff-ball.* Size of a pea, sessile, gregarious, on rotten wood. Schoef. 193. LIGHTF.
7. *Epiphyllum. Little yellow parasitic Puff-ball.* Sessile, size of a pin's head, gregarious, filled with an elastic down. Hall. H. belv. 2168. Upon dead leaves, &c. LIGHTF.
8. *Nigrum. Little black parasitic Puff-ball.* Size of a small pin's head, gregarious, sessile, contiguous. On the rotten stumps of trees. LIGHTF. xxxi. p. 962. New species,

#### MUCOR. Mould. Vesicles on pedicles,

\* *Permanent.*

1. *Sphærocephalus. Round-headed M. or Mould.* Stem filiform, black. Head grey. On rotten wood. Hall. H. belv. iii. 1. 48.
2. *Lichenoides. Grey-headed M.* Stem black, subulate. Head lenticular. On rotten wood. Dill. 14. 3.
3. *Embolus. Black M.* A black bristle, beset with brown hairs. On rotten wood. S. Brit.

\*\* *Fugitive.*

\* \* *Fugitive.*

4. Mucedo. *Cotton M.* Grey, pellucid. Capsule globular. On stale bread, &c. *Fl. dan.* 467.
5. Leprosus. *Yellowish M.* Setaceous. Seeds radical. In vaults, &c. *S. Brit.*
6. Glaucus. *Greenish M.* Head round, aggregated. On apples, &c. *Michel.* 212. 91.
7. Crustaceus. *Fingered M.* White. Spikes digitated. Head and bristles watry. On putrid meats. *Michel.* 212. 91.

I N D E X.



# I N D E X.

## G E N E R A.

<b>A</b> <sup>B I R S</sup> ———	266	Anemone ———	165
Acer ———	297	Anethum ———	89
Achillea ———	254	Angelica ———	86
Acorus ———	108	Anthemis ———	253
Acrosticum ———	301	Anthericum ———	113
Actea ———	160	Anthoceros ———	328
Adiantum ———	305	Anthoxanthum ———	17
Adonis ———	167	Anthillis ———	216
Adoxa ———	125	Antirrhinum ———	187
Ægilops ———	295	Aphanes ———	53
Ægopodium ———	91	Apium ———	90
Æthusa ———	96	Aquilegia ———	164
Agaricus ———	352	Arabis ———	200
Agrimonia ———	146	Arbutus ———	128
Agrostemma ———	141	Arctium ———	238
Agrosticum ———	284	Arenaria ———	137
Agrostis ———	27	Aristolochia ———	267
Aira ———	29	Artemesia ———	244
Ajuga ———	172	Arum ———	268
Alchemilla ———	52	Arundo ———	39
Alisma ———	117	Asarum ———	144
Allium ———	109	Asparagus ———	113
Alopecurus ———	26	Asperugo ———	62
Alfina ———	100	Asperula ———	46
Althea ———	211	Asplenium ———	302
Amaranthus ———	279	Aster ———	249
Anagallis ———	66	Astragalus ———	222
Anchusa ———	60	Athamanta ———	93
Andromeda ———	127	Athanasia ———	243
		Atri-	

Artiplex	—	296	Ceraſtium	—	142
Atropa	—	68	Ceraſus	—	137
Avena	—	38	Ceratophyllum	—	279
Azalea	—	67	Chærophyllum	—	83
			Chamædrys	—	160
Ballota	—	179	Chara	—	269
Bartſia	—	183	Cheiranthus	—	199
Bellis	—	251	Chenopodium	—	78
Berberis	—	110	Chelidonium	—	161
Beta	—	80	Cherleria	—	138
Betonica	—	177	Cherophyllum	—	98
Betula	—	277	Chironia	—	69
Bidens	—	242	Chryſanthemum	—	252
Blafia	—	327	Chryſoſplenium	—	129
Boleus	—	357	Cichorium	—	238
Borrago	—	62	Cicuta	—	96
Brasſica	—	201	Cineraria	—	251
Briza	—	33	Circea	—	11
Bromus	—	36	Ciſtus	—	163
Bryonia	—	294	Clavaria	—	360
Bryum	—	312	Clematis	—	166
Buſonia	—	54	Clinopodium	—	180
Bunias	—	206	Cochlearia	—	196
Bunium	—	84	Colchicum	—	116
Bupleurum	—	84	Comarum	—	159
Butomus	—	126	Conſerva	—	348
Buxus	—	278	Conium	—	93
Byſſus	—	351	Convallaria	—	107
			Convolvulus	—	67
Callitriche	— 10,	269	Conyza	—	246
Caltha	—	171	Coriandrum	—	96
Campanula	—	70	Cornus	—	51
Cardamine	—	202	Corylus	—	282
Carduus	—	239	Cotyledon	—	138
Carex	— 271,	287	Crambe	—	207
Carlina	—	242	Cratægus	—	152
Carpinus	—	282	Crepis	—	236
Carum	—	89	Crithmum	—	86
Caſtanea	—	264	Crocus	—	18
Caucalis	—	92	Cucubalus	— 134,	292
Centaurea	—	255	Cuſcuta	—	54
Centunculus	—	50	Cynogloſſum	—	60

Cyno-

Cynofurus	34	Fraxinus	298
Cyperus	20	Fritillaria	111
Cypripedium	266	Fucus	341
		Fumaria	213
Dactylis	33	Fungi	352
Daphne	122		
Datura	68	Galanthus	105
Daucus	93	Galeopsis	177
Delphinium	164	Galium	46
Dentaria	183, 198	Genista	215
Dianthus	132	Gentiana	123, 53, 82
Digitalis	190	Geranium	208
Dipsacus	44	Geum	158
Draba	193	Glaux	76
Drosera	102	Glecoma	176
Dryas	159	Gnaphalium	294 245
Echium	63	Hedera	75
Echinophora	91	Hedysarum	222
Elatine	125	Helleborus	170
Elymus	40	Helvella	359
Empetrum	286	Heracleum	94
Epilobium	119	Herniaria	77
Equisetum	299	Hesperis	200
Erica	121	Hieracium	234
Erigeron	246	Hippocrepis	221
Eriocaulon	276	Hippophæ	288
Eriophorum	23	Hippuris	9
Ervum	220	Holcus	295
Eryngium	83	Holosteum	43
Erythrum	198	Hordeum	41
Euonymus	52	Hottonia	65
Eupatorium	242	Humulus	288
Euphorbia	147	Hyacinthus	108
Euphrasia	184	Hydnum	359
		Hydrocharis	291
Fagus	281	Hydrocotyle	83
Festuca	34	Hyoscyamus	74
Filago	256	Hyoseris	237
Fontinalis	308	Hypericum	228
Fragaria	156	Hypnum	317
Frankenia	105	Hypochæris	237



Jasione	—	257	Lycopfis	—	63
Iberis	—	197	Lycopus	—	16
Ilex	—	55, 42	Lyfimachia	—	65
Illecebrum	—	76	Lythrum	—	99
Impatiens	—	259, 244			
Imperatoria	—	98	Malva	—	211
Inula	—	250	Marchantia	—	326
Iris	—	19	Marrubium	—	179
Ifatis	—	206	Matricaria	—	252
Ifoetes	—	306	Medicago	—	226
Juncus	—	105	Melampyrum	—	185
Jungermania	—	322	Melica	—	30
Juniperus	—	293	Melissa	—	181
			Melittis	—	181
			Mentha	—	174
			Menianthes	—	64
Laetluca	—	232	Mercurialis	—	291
Lamium	—	176	Mespilus	—	153
Lampfana	—	223	Milium	—	27
Lapfana	—	238	Mnium	—	310
Lathræa	—	186	Monotropa	—	127
Lathyrus	—	217	Montia	—	42
Lavatera	—	212	Mucor	—	362
Lemna	—	269	Myagrum	—	192
Leontodon	—	233	Myosotis	—	59
Leonurus	—	179	Myosurus	—	104
Lepidium	—	194	Myrica	—	288
Lichen	—	328	Myriophyllum	—	280
Ligusticum	—	86			
Ligustrum	—	11	Narcissus	—	109
Limosella	—	191	Nardus	—	23
Linum	—	58, 102, 87	Nepeta	—	174
Lithospermum	—	59	Nymphæa	—	160
Lithrum	—	115, 145			
Littorella	—	277	Oenanthe	—	94
Lobelia	—	257	Ononis	—	215
Lolium	—	39	Onopordum	—	241
Lonicera	—	73	Ophioglossum	—	300
Lotus	—	226	Ophrys	—	263
Lychnis	—	142, 292	Orchis	—	260
Lycoperdon	—	361	Origanum	—	180
Lycopodium	—	306	Ornithopus	—	221
			Orni-		

Ornithogalum	—	111	Primula	—	64
Orobanche	—	183	Prunella	—	182
Orobus	—	217	Prunus	—	151
Osmunda	—	300	Pteris	—	301
Oxalis	—	141	Pulmonaria	—	61
			Pyrola	—	128
			Pyrus	—	154
Padus	—	137			
Panicum	—	24	Quercus	—	281
Papaver	—	161			
Parietaria	—	296	Ranunculus	—	167
Paris	—	125	Raphanus	—	202
Parnassia	—	100	Refeda	—	146
Pastinaca	—	88	Rhamnus	— 288, 76,	271
Pedicularis	—	186	Rhinanthus	—	184
Peplis	—	111	Rhodiola	—	290
Peucedanum	—	85	Ribes	—	75
Peziza	—	359	Riccia	—	327
Phalaris	—	24	Rosa	—	154
Phallus	—	359	Rottboella	—	40
Phascum	—	308	Rubia	—	49
Phellandrium	—	95	Rubus	— 292,	155
Phleum	—	25	Rumex	— 289,	114
Phyteuma	—	72	Rupia	—	57
Picris	—	231	Ruscus	—	293
Pilularia	—	306			
Pimpinella	—	289, 90	Sagina	—	57
Pinguicula	—	15	Sagittaria	—	280
Pinus	—	283	Salicornia	—	9
Pisum	—	216	Salix	—	284
Plantago	—	49	Salsola	—	81
Poa	—	31	Salvia	—	16
Polemonium	—	68	Sambucus	—	99
Polygala	—	214	Samolus	—	72
Polycarpon	—	43	Sanguisorba	—	49
Polygonum	— 114, 123,	77	Sanicula	—	84
Polypodium	—	303	Saponaria	—	132
Polytricum	—	309	Satyrion	—	262
Populus	—	290	Saxifraga	—	129
Potamogeton	—	55	Scabiosa	—	45
Potentilla	—	156	Scandix	—	97
Poterium	—	281	Schoenus	—	20
Prenanthes	—	233			

Scilla	112	Teucrium	173
Scirpus	21	Thalictrum	166
Schleranthus	132	Thesium	76
Scrophularia	189	Thlaspi	194
Scutellaria	182	Thymus	181
Secale	41	Tilia	42, 163
Sedum	139	Tordylium	91
Sempervivum	147	Tormentilla	158
Senecio	248	Tragopogon	230
Serapias	265	Tremella	341
Serratula	238	Trichomanes	305
Sherardia	45	Trientalis	118
Sibbaldia	103	Trifolium	223
Sibthorpia	190	Triglochin	116
Silene	134	Triticum	41
Sinapis	205	Trollius	170
Sison	88	Turritis	201
Sylvestrium	203	Tussilago	247
Sium	87	Typha	270
Smyrnium	89		
Solanum	69	Vaccinium	120
Solidago	249	Valantia	296
Sonchus	231	Valeriana	10, 18, 287
Sorbus	153	Vella	192
Sparganium	271	Verbascum	73
Spartium	214	Verbena	172
Spergula	103, 144	Veronica	12
Sphagnum	307	Viburnum	99
Spirea	154	Vicia	219
Splachnum	309	Vinca	70
Stachys	178	Viola	258
Statice	101	Viscum	287
Staphylea	100		
Stellaria	136	Ulex	215
Stipa	37	Ulmus	81
Stratiotes	165	Ulva	347
Subularia	193	Urtica	288, 278
Swertia	82	Utricularia	15
Symphytum	61		
		Xanthium	279
Tamus	289		
Tanacetum	243	Zanichellia	268
Targionia	326	Zostera	267
Taxus	293		SPE-

## S P E C I E S.

<b>A</b> DDER's Tongue	300	Bear-berries	128
Agaric	352	Bedstraw	46
Agrimony	146	Beech-tree	282
— water-hemp	242	Bell flower	72, 71
Alder-tree	278	Beet	80
— black berry-bear-		Betony, Paul's	12
ing	77	— water	189
Alexanders	89	— wood	178
Alkanet, bastard	60	Bilberries	120
Alt heal	177	Bind-weed	67
— clowns	178	— black	124
— feed	80, 58, 43	Birch-tree	278
— good	78	Birds-cherry	151
Aloe-water	165	— eye	64
Angelica	87	— foot	221
Anemone	166	— nest	127, 93, 262
Archangel	176	Birthwort	267
Arrow-head	280	Bistort	123
Arsmart	124, 77, 114	Blite	79, 78, 279
Afarabacca	145	Bloodwort	115
Ash-tree	298	Bluebouldes	255
— mountain	153	Bog rush	20
Ash-weed	91	Borage	62
Asp	290	Box-tree	278
Astphodel	213	Bramble	156
Avens	158	Brank	125
Awlwort	193	Briar, common	155
		— sweet	155
Balsamine	259	Brocklime	13
Bane berries	160	Broom	214
Barberry	110	— rape	183
Basil	180	Briony, black	289
Basil, wild	180, 181	— white	294
Baum, bastard	182	Buck-bean	65
Beam-tree, white	152	— thorn	77, 288
Bear's-foot	170	— wheat	125
	B b 2		Bugle

Bugle	172	Chickweed breakstone	57
Bugloss	60	common	100
cowslip	61	mouse-ear	142
Bullace-tree	151	sea, plantain-	
Burdock	279, 238	leaved	137
Burnet	49, 281	larch - leaved,	
Bur-reed	271	&c.	138
Butchers-broom	293	star-headed	10
Butter-bur	247	water	42
cups	168	winter - green	
wort	15		118
Cabbage	201	Cicely, wild	98
sea	202	Cinquefoil	157, 103
Calamint	181	bastard	88, 157
Caltrops	56	marsh	159
Campion	134	silver - leaved,	
Candytuft-bitter	197	&c.	157
Canterbury bells	71	Cistus, dwarf, &c.	163
Carex	271	Cives	110
Carrot, wild	93	marsh	127
Caraways	90	Carrot	93
Cat-mint	174	Clary	16
Cat's-ear	237	Cleavers	48, 47
foot	294	Climber	166
tail	270	Clot-bur	238
Catchfly	135	Cloud-berry	292
red German	142	Clover	227
Celandine, greater	161	Cornwal	15
less	168	Corn-fallad	18
Centaury, marsh	53	Cotton-grass	23
less	70	Cotton-weed	245
yellow	123	Corn violet	72
Chamomile	253	Cockle	142
Champignon	352	Cock's-comb	184
Charlock	202	Club-rush	21
Cheese renning	47	Cock's-head	222
Cherry-tree	151	Colewort	207
Chervil	97	Coltsfoot	247
Chestnut-tree	282	Columbines	165
Chickweed, bastard	54, 42	Comfrey	62
berry-bearing		Coral-wort	198
	134	Coriander	97
		Cornel	

Cornel	51	Dog-berry	51
Cow-weed	98	— rose	155
— wheat	183	— white	ibid
— crested	185	Drop-wort	95, 154
Cowslips	64	— water	95
Crane-berries	121	— hemlock	95
Crab-tree	154	— pimpernel	95
Crake-berries	286	Ducks meat	270
Cranesbill	208	Dwale	68
Crefs, bastard	195	Dyers-weed	146, 215
— penny	194	Earth-nut	85
— rocket	178	Eglantine	155
— rock	197	Elder	99
— swines	196	— water	99
— water	204	Elecampane	250
— winter	198	Elm	81
Cromwell	59	Eryngo	83
Croswort	296	Eyebright	183
Crowfoot	168	— cow-wheat	184
— berries	286	Fellwort	82
— musk-wood	125	Fennel	89
Cuckow-flower	142, 292	— hogs	85
Cudweed	243, 256, 294	Fern	300
Currants	75	Feverfew	252
Cyperus, bastard	20, 22	Figwort	189
— sweet	20	Fir	283
Daffodil, pale	109	Flag, sweet smelling	108
— English	109	Flag-flower, stinking	19
— chequered	111	Flax	102
Daisy	251	Fieabane	246
Dandelion	233	Flixweed	205
Danewort	100	Flower de luce	19
Darnel	40	Fluellin	187
Deptford-pink	133	Fox-glove	190
Devil's bit	45	Frog-bit	291
— yellow	234	Fumitory	213
Dew-berry	156	Furze	215
Dillisk	345	Galingale	20
Dittander	194	Garlick	109, 10
Dock	115	Gatter-	
Dodder	54		

Gatter-tree	50	Grass mat	23
Gentian	53	— millet	27
Gelder-rose	99	— oat	38
— marsh	82	— panic	25
Germander	13, 173	— Parnassus	101
Gilly-flower, sea	101	— poly	115
Gladdon, sinking	19	— quaking	32
Gladiole	126, 257	— quick	41
Glaswort	9	— rye	41
— white	80	— reed	39, 24
— prickly	81	— soft	295
Globe flower	170	— spring	17
Goats-beard	230	— sea	57, 24
Goldilocks	168, 311	— sea hard	295
Gold of pleasure	192	— scurvy	196
Golden rod	250	— sea spiked	116
— berry	75	— vetch	217
— foot	78	— wheat	42
— Grass	47, 48	— whitlow	193
Gorse	215	— wrack	267
Gout-weed	91	Gromwell	59
Grass, arrow-headed	116	Ground-ivy	176
— barley	41	— pine	173
— bent	27	Groundsel	248
— broom	36		
— Canary	24, 26	Hare-bells	108
— cat's tail	24, 25	Hares-ear, least	84
— cock's-foot	33	Harts-tongue	302
— cotton	23	Hazel-nut-tree	282
— cyperus	271	Hawkweed	234, 231
— darnel	40	— beard	236
— dogs-tail	34	Hawthorn	152
Grass, feather	38	Hearts-ease	258
— fescue	34	Heart-wort	92
— flea	272	Heath, common	121
— fox-tail	26	— berried	286
— hair	29	— smooth sea	105
— hard	40	— broad-leaved sea	105
— knot	124	— fine-leaved	121
— lime	41, 40	— cross-leaved	121
— meadow	31	Hedge hyssop	115
— melic	30	— nettle	178
		mustard	



Hedge mustard —	198	Kidney-wort —	139
Helebores —	170	—— hairy —	129
Helleborine —	266	—— vetch —	216
Hemlock —	93	Knapweed —	255
—— water —	95	Knawel —	132
Henbane —	75	Knot-grass —	124
Henbit —	14	—— German —	132
Hens-foot —	92	—— verticillate —	76
—— great —	177		
Herb Bennet —	158	Ladies bedstraw —	46
—— Christopher —	160	Ladies finger —	216
—— Gerrard —	91	—— mantle —	52
—— Paris —	125	—— slipper —	266
—— Robert —	209	—— smock —	202
Holly-tree —	55	—— traces —	264
—— knee —	93	Lambs lettuce —	18
—— sea —	83	Larkspur —	164
Honeyfuckle —	51, 73	Laver —	347
—— dwarf —	51	Laurel, spurge —	123
Honeywort —	88	Lavender, sea —	101
Hops —	289	Lettuce —	232
Hoarhound, base —	178	Lilly of the valley —	107
—— stinking —	179	—— yellow water —	160
—— water —	16	—— white —	160
—— white —	179	Lime-tree —	163
Horn-beam —	282	—— wort —	133
Horseradish —	197	Ling —	121
—— tail —	9, 269, 299	Liquorice —	222
Houfeleek —	150	Live-long —	139
Hounds tongue —	61	Liver-wort —	328
Hyacinth —	108	Lizard-flower —	263
—— vernal star —	112	Locker-gowls —	170
		London-pride —	130
Irish worts —	122	Looking-glass Venus's —	72
Jack-by-the-hedge —	198	Loose-strife, purple-spiked —	45
Jacob's ladder —	68	—— yellow —	65
Jar-nut —	85	Lucern —	227
Jews ear —	360	Lungwort —	333, 61, 235
July-flower —	199, 101	—— golden —	220
Juniper —	293		
Ivy —	75		
—— ground —	176		
			Madder,

Madder, bastard	— 47	Moss water	— 308
— croffwort	— 48	Mother of thyme	181
— field	— 46	— wort	180
— wild	— 47, 49	Mould	— 362
Madwort	— 13, 62	Mouse-ear, coddled	200, 43
Maidenhair	— 302	— scorpion	grafs
— golden	— <i>ib.</i>	— tail	— 59
— sea	— <i>ib.</i>	—	104
— true	— 305	Mug-wort	— 244
— white	— 302	— weed	— 296
Mallow	— 211	Mullein	— 73
Maple	— 297	Mushroom	— 355
Marjoram, wild	— 180	— mitre	— 359
Mares-tail	— 9	Mustard, common	206
Marigold, marsh	— 171	— hedge	— 198
— corn	— 252	— mithridate	194
Marsh-mallow	— 211	— tower	— 201
Masterwort	— 98	Mustard, treacle	194
Matfellow	— 255	— white	— 206
Matweed	— 23	— wild	— 205
Mealy-tree	— 99	Myrtle, Dutch	— 288
Meadowsweet	— 154	Nap	— 174
Medic	— 227	Navelwort	— 139
Medlar	— 153	Needle, shepherds	97
Melilot	— 223	— furze	— 200
— trefoil	— 227	Networt	— 277
Mercury	— 291, 78	Nettle, common	— 288
Milfoil	— 280, 254	— dead	— 176
— water	— 15, 280	— hemp	— 177
Milkwort	— 214, 76	— hedge	— 178
— sea	— 76	— Roman	— 278
— purple	— 222	Nevev	— 201
Mint	— 174	Nightshade	— 68
Miffel or Miffeltoe	287	— enchanters	— 11
Money-wort	— 66	Nipplewort	— 238
— bastard	190	Nut, earth	— 85
— purple	67	— bladder	— 100
Moonwort	— 300	Oak	— 281
Morel	— 359	Orach	— 79, 80
Moschatel	— 125	— wild, &c.	— 297
Moss, bog	— 307	Orpine	
— club	— 306		

Orpine	139	Pignut	85
Orchis	260	Pilewort	168
Oſier	286	Pimpernel, baſtard	51, 167
Oſmund, royal	300	male	66
Ox-eye	254	yellow	66
— tongue	231	water	72
		Pink	133
Panſies	258	Pink, Deptford, &c.	133
Park-leaves	228	meadow	142
Pariſley	88	moſs like	57
— corn	88	Pine, ground	173
— fine leaved baſtard	78	Plantain	117, 50
— fools	96	baſtard	191
— hedge	92	water	117
— knotted	93	Polypody	302
— mountain-ſtone	93	Pondweed	55, 268, 280
— piert	53	Poplar	290
— ſea	86	Poppy	161
— ſtone	88	wood	51
Pariſnep	87	Prim	11
— cow	94	Primroſe	64
— ſea	91	Privet	11
— water	87	Puff-balls	361
Paſque flower	165	Purſlane, water	111
Pearlwort	57	— ſea	296
Pear tree	154	Quicken-tree	153
Peaſe everlaſting	218	Quill-wort	306
— heath	217	Raddiſh, baſtard	202
— ſea	216	horſe	197
— wood, &c.	217	water	204
Pellitory of the wall	296	Ragwort	248
Penny-royal	176	Rampions	71
— wort, marſh	83	horned	72
— wall	139	Ramſon	110
Pepper-graſs	306	Raſpberry-buſh	155
— water	114	Rattle, yellow	184
— wort	194	red	186
Periwinkle	70	Reed-mace	270
Phaſcum	308	Reſt-harrow	215
Pheafant's eye	167	Ribwort	50

Rocket

Rocket, bafe	146	Saxifrage white	131
— crefs	192	Scabious	257, 45
— wall	204	— sheeps	257
— fea	206	Scurvygrafs	196
— water	204	Self-heal	182
— land	204	Sea-heath	105
— winter	198	Shoreweed	277
— yellow	205	Sengreen	130, 131
Rofe	155	Septfoil	158
Rofewort	127	Service-tree	152
Rofemary, wild	290	— true	153
Rue, meadow	166	Setterwort	170
Rupture-wort	77, 58	Shepherd's needle	97
Ruth	106	— purfe	195
— bog	20	Sicklewort	172
— bull	22	Silverweed	157
— club	21	Sloe-tree	152
— flowering	126	Smallage	90
— grafs	20	Snakeweed	123
— hares-tail	23	Snapdragon	188
— hard fea	106	Sneezewort	254
— round headed	106	Snowdrop	105
	22	Soapwort	132
Sage wood	173	Soldier, fresh water	165
Saffron	116, 19	Solomon's feal	108
— mountain	113	Sorrel	289
Saintfoin	222	— mountain	114
St. John's wort	228	— wood	141
St. Peter's wort	228	Scuttherowood	244
Sallow	286	Sow-thistle	216, 217
Saltwort	9	— bane	79
— black	76	Sparagus	113
Sampire, marfh	9	Spearwort	167
Sampire	91, 251, 86	Speedwell	12
Sanicle	15, 84	Spegnel	94, 96
Satyriion	263	Spikenard	246
Sauce alone	198	Spindle-tree	52
Saw-wort	238	Splachnum	309
Saxifrage, burnet	289, 90	Spleenwort	301
— Cornwall	86	Spring grafs	17
— English	144	Spurge laurel	122
— golden	129	— olive	122
— meadow	85	— fea, &c.	147
			103

Spurrey corn	144	Tormentil	158
Squinancy wort	46	Traveller's Joy	166
Star of Bethlehem	111	Trefoil, bird's-foot, &c.	223
— thistle	255	— marsh	65
— wort	249, 10	True-love	125
— sea	249	Truffle	361
Stichwort	36, 57	Turnip	202
Stitchwort	136	Tutsan	228
Stonecrop	19	Twyblade	264
Strawberry	156		
— tree	128		
Succory	231, 236	Valerian	287, 10, 18
— yellow	231	— Greek	68
Sun-dew, round-leaved	103	Venus's comb	97
— long leaved	103	— looking-glass	72
Sweetwilliam	134	Vervain	172
Sycamore	297	Vetch	216
		Vetchling	217
		Violet	258
Tansey	243	— calathian	82
— wild	157	— dame's	200
Tare	218, 220	— water	65
Teasel	44		
Thistle	231	Wake-robin	268
— spear, &c.	239	Wall flower	199
— sow	233	— wort	100
— St. Barnaby's	256	Water-creffes	204
Thong sea	343	— dock	115
Thorn-apple	68	Water lilly	65, 160
— black	152	— wort	125
— buck	271	— milfoil	15
— fallow	288	— flag	19
— white	152	Way-bread	50
Thorough-wax	84	— faring-tree	99
Thrift	101	— thistle	239
Throatwort	71	Whins	215
Thyme	181	White-root	83
Toadflax, bastard	76	Whitlow-grafs,	193
— yellow, &c.	188	Whorle-berries	120
— ivy-leaved	187	Willow-herb	65, 119
Toothwort	186	Willow	234
Touch me not	259	Willow hooded	182
		Willow	

Willow rose-bay —	119	——— roof ———	46
——— sweet ———	288	Worm-feed, treacle	199
——— tufted ———	66	——— wood ———	244
——— yellow ———	65	Worts, Irish ———	122
Winter-green ———	118	Wrack, grafs ———	267
Winter-green, common,		——— sea ———	342
&c. ———	128		
Woad ———	206	Yarrow ———	254
——— wild ———	146	Yew-tree ———	293
Wood-bind ———	73		

## F I N I S.

## E R R A T A.

Page 23, *for* Eriophorom *read* Eriophorum.

35, *for* Ffescue *read* Fescue.

231, *for* Hawkwood *read* Hawkweed.









